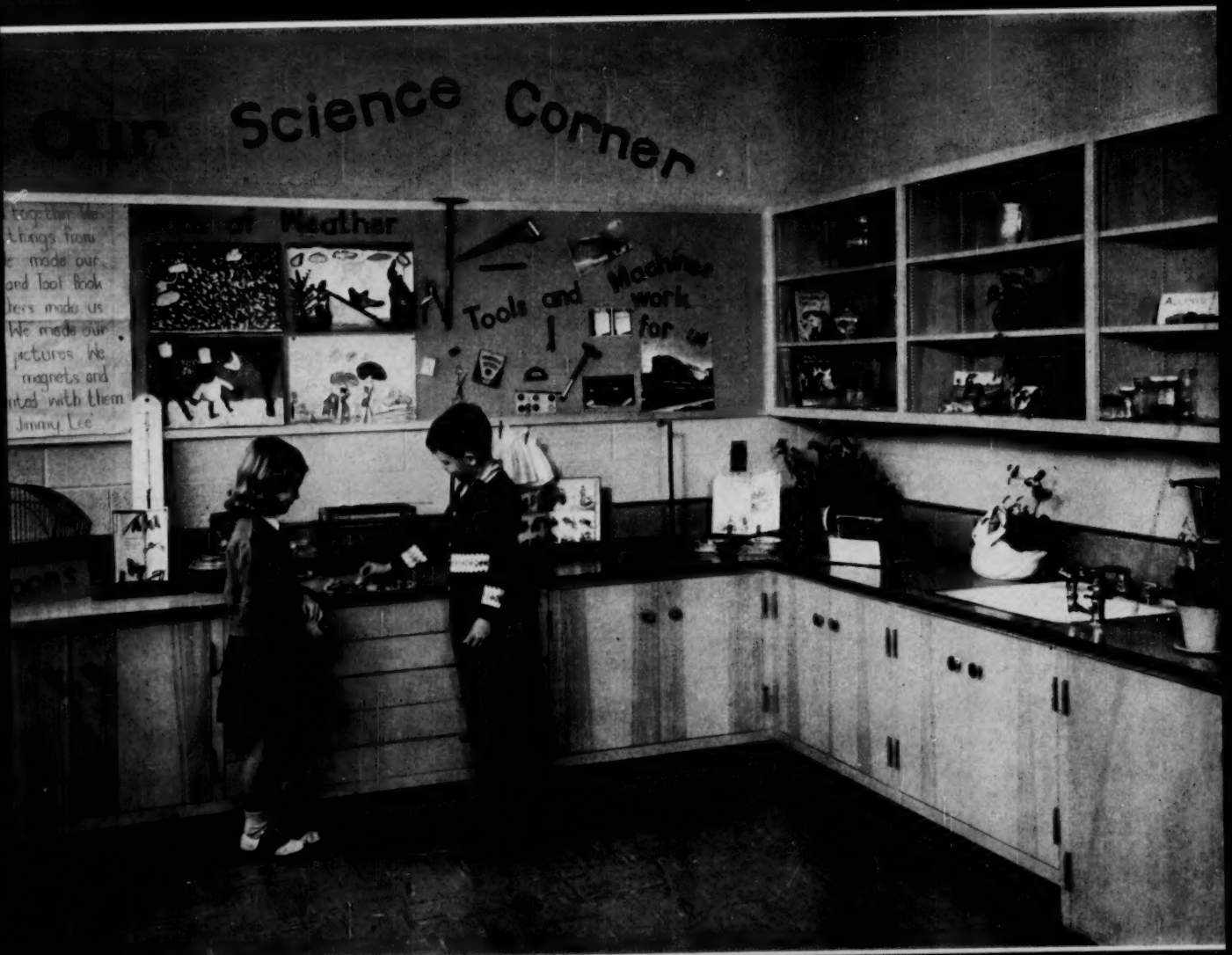
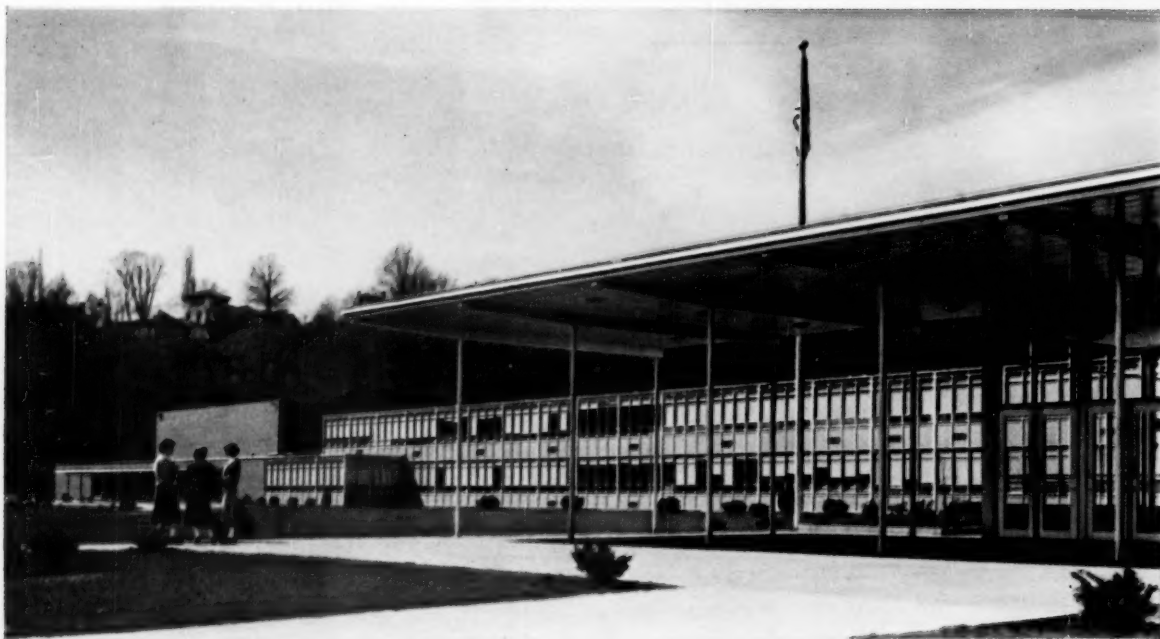


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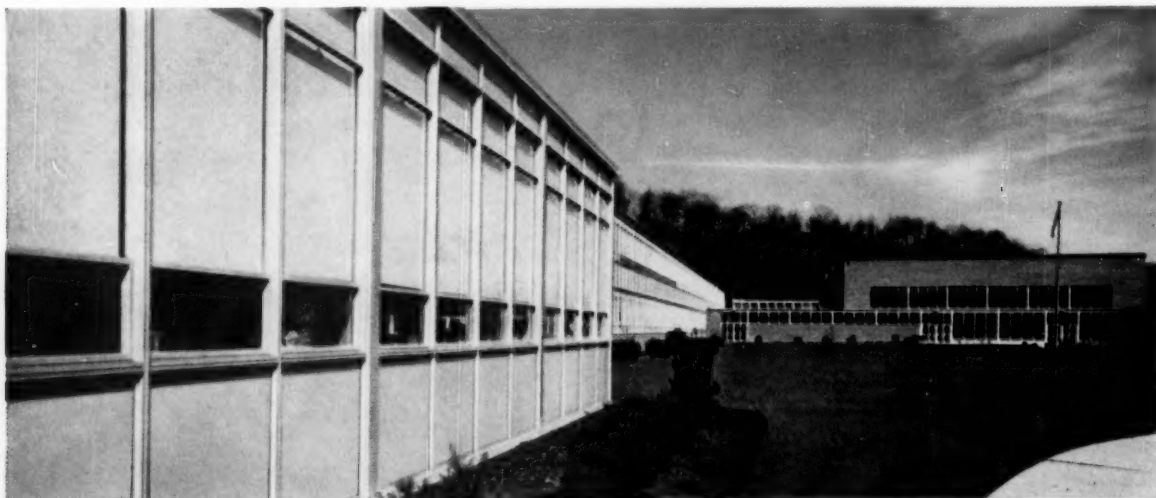


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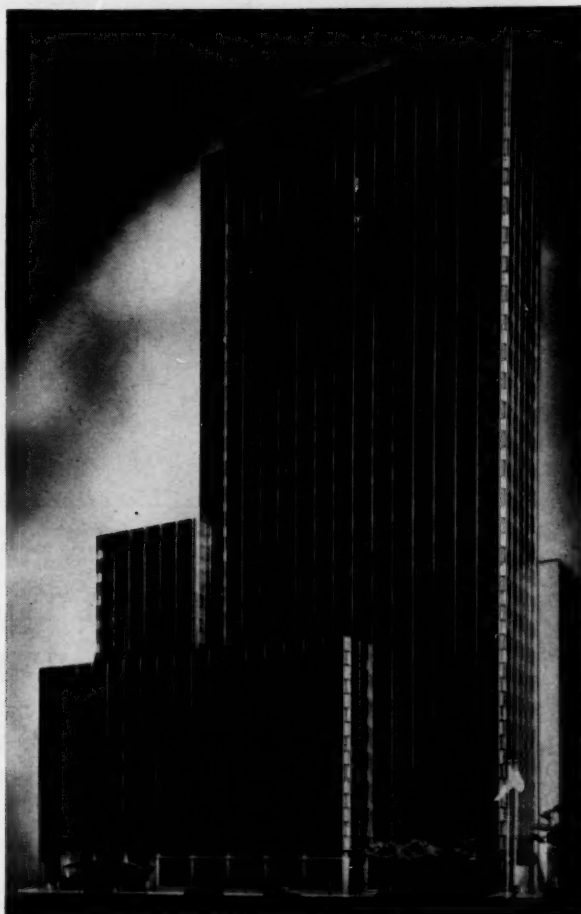
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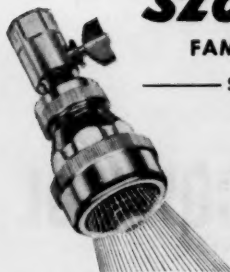
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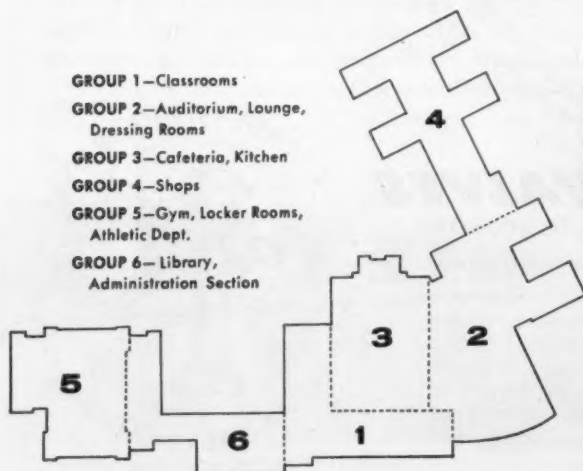
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Articles in this issue

Design for a National Curriculum

PAUL R. HANNA

A curriculum based solely on community interests is not enough. Instructional programs must develop the common outlook essential for national survival. The author offers a timetable for professional action 43

Criticism: How to Deal With It

ROUND TABLE

Eight participants in a round-table discussion at Denver, sponsored by the Administrator's Clinic, advise school people not to be too thin-skinned about well meant criticism. Use this interest, they say, to get better quality in education . 46

Teachers Rate Merit Rating

MERLE W. TATE and CHARLES F. HAUGHEY

Opinions of 849 teachers and 18 administrators show that teachers are more in favor of merit rating as a theory than as an operating policy. Experienced teachers fear it more than beginners do 48

Never Forget: Teaching Comes First

CLYDE M. CAMPBELL

The administrator cannot do effectively all the tasks that are his responsibilities; consequently, instruction is a mandatory first call. Routine services can and should be delegated to others 51

For the Board, a Sense of Decorum

JAMES M. SPINNING

After adopting a policy, the school board must unanimously support it, says this superintendent emeritus. Board members should know if school buildings are safe, but not be concerned about the location of the mop closets 53

They All Want In

FREDERICK "CHALK DUST" MOFFITT

The trials and tribulations of the superintendent trying to obtain college placements for all his charges are described with feeling by our favorite Chalk Dust author 55

Neighborhoods Combine to Serve Exceptional Children

C. LEWIS MARTIN

Cooperation among 14 school districts in west suburban Cook County, Illinois, has led to a program of special education that, with the help of state aid, serves both handicapped and gifted children 60

School Bus Standards Can Vary

LEE O. GARBER

Creating larger school districts results in increased emphasis on pupil transportation. This problem and the question of transporting parochial pupils are discussed by our school law expert 68

Practice and Theory in Athletics Funds Accounting

TNS JURY SURVEY

Business officials report that the independent control of athletic funds is fast disappearing. These funds should be administered as part of the general budget, they say 70

Continued on next page ►

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THE Nation's Schools

OPINION POLL

Contract Jumping

On the question of setting a date beyond which a teacher cannot break a contract, 81 per cent of the superintendents queried agree that a deadline is necessary. Some suggest penalties.

SUPERINTENDENTS' RESPONSES 6

AUDIO-VISUAL

Preparing Teachers to Use A-V Materials

An education library has combined, in one large room, a variety of materials and equipment to provide a convenient laboratory for students and teachers

A. MONTGOMERY JOHNSTON and DOROTHY RYAN 58

SCHOOLHOUSE PLANNING

Alcove Workroom Developed in Three Patterns

In a decade of experimentation, schools in Hammond, Ind., have developed workroom space separated from the classroom but near enough to permit close teacher supervision.

LEE L. CALDWELL 63

Wanted: More and Better Research in Schoolhouse Planning

The need is great for research and standards in the school construction field, says the president of the National Council on Schoolhouse Construction. Areas for fact-finding are suggested.

HAROLD SILVERTHORN 66

SCHOOL LUNCH

How to Coordinate School Lunch With Curriculum

We seldom find an excellent school lunch program unless the superintendent and principal are giving it enthusiastic support, comments Utah's state superintendent.

E. ALLEN BATEMAN 72

OTHER FEATURES

Letters to the Editor	8	About People	110
Looking Forward	41	The Bookshelf	116
Administrator's Clinic	46	Coming Events	120
Report From Washington	78	What's New for Schools	123
News in Review	84	Index of Advertisers	161



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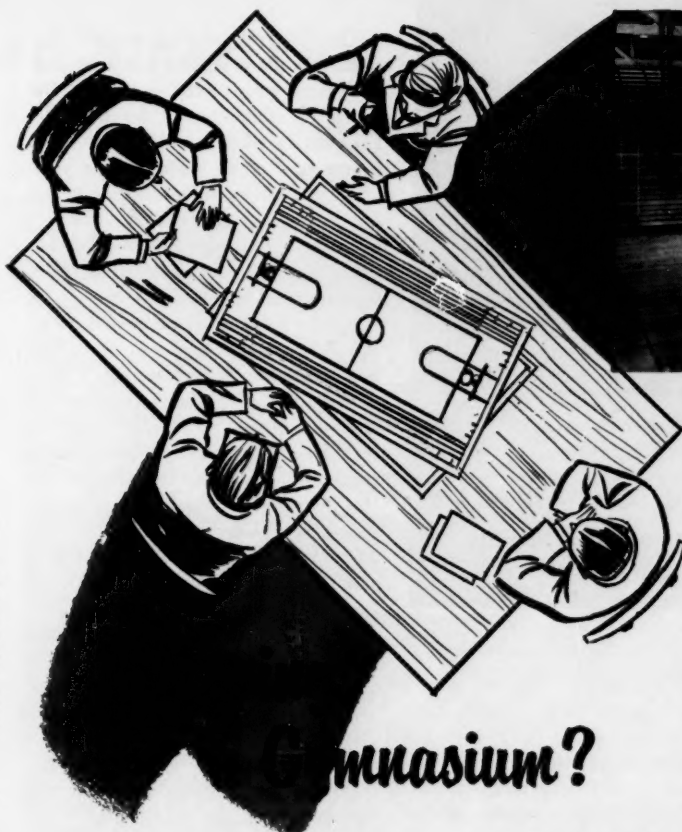
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OPINION POLL

BREAKING TEACHER CONTRACTS

1. Do you favor setting a date beyond which a teacher would not be released from a signed contract if he sought the release so that he could take a position in another school district?
Yes _____ 81% No _____ 18% No opinion _____ 1%
2. If Yes, what date would you set as deadline for contract cancellation?
June 1 _____ 13% July 1 _____ 27%
July 15 _____ 27% Other _____ 33%
3. Would you set up penalties for cancellation past the deadline?
Yes _____ 58% No _____ 26% No opinion _____ 16%
4. Do you think the code of ethics should be changed, so that one could offer a position to a teacher under contract to another school district?
Yes _____ 31% No _____ 53% No opinion _____ 16%

A nationwide sampling of superintendents' opinions by The Nation's Schools

CONTRACT jumping, a practice teachers at times indulge in, may not cost them their heads, but it could cost them their teaching certificates or a slice of their paycheck. Grieved superintendents seem to mean business when they lay down these terms in this month's nationwide opinion poll.

"Do you favor setting a date beyond which a teacher would not be released from a signed contract if he sought the release so that he could take a position in another school district?" asked The NATION'S SCHOOLS in a random sampling of superintendents' opinion. Yes, loudly agreed 81 per cent, almost drowning out the 18 per cent voice of opposition. About 1 per cent of those queried kept their opinions to themselves.

Don't Want the Discontented

The argument largely advanced by the opposition is: "Why hold a teacher who wishes to change?" Holding someone on a job when he wishes to change makes a discontented teacher. "When teachers want to leave, we want them to," says a Missouri superintendent. A New York colleague, sharing his point of view, says that he "gladly relieves any person any time who does not feel like staying in the school system and who can do better himself elsewhere."

"We don't like discontented teachers. It hinders their performance and effectiveness," says a chorus of voices

from New Jersey, Pennsylvania, California and other states.

However, from Oregon and elsewhere comes the plea for a definite date beyond which a teacher cannot seek release from his contract.

Little Agreement on Date

What date then do administrators favor as a deadline for contract cancellation? Of those who answered affirmatively to the first question, 37 per cent indicated July 1 to be the most feasible date, and 27 per cent voted for July 15 as their first choice of deadline. June 1 got the vote of 13 per cent, and the rest (22 per cent) indicated other dates, with more than a half of this group of schoolmen favoring August 1.

In contrast to the terms suggested by one superintendent, who would have 120 days' notice before opening of school for cancellation of a contract, one lenient administrator would permit 20 days' notice before the opening of school.

That a deadline is effective in curbing requests for release is proved by reports from Ohio and Kansas.

"In Kansas," says a schoolman, "we have the 'continuing contract' law, which states that if the school does not wish to rehire a teacher, the teacher must be notified by March 15. If the teacher doesn't wish to return, he must notify the board by April 15; otherwise the contract is automatically renewed."

The Ohio respondent reports that after July 10 a teacher in Ohio cannot resign without the consent of the board of education. If he does, he loses his certificate and cannot teach in any part of the state for one year.

Many superintendents are quite fair on the subject of releasing teachers from their contracts. A Nebraskan believes that a teacher seeking a better teaching position should be released if he wants to be, because breaks sometimes come late in the summer. He uses this line of reasoning: "How would I feel if I were the teacher and wanted release?"

A New York superintendent leaves the matter of release of personnel to the discretion of the board when request for release occurs after July 15. Most boards, this administrator says, don't wish to deprive worthy people of the opportunity to make an advancement that may come only once. However, the same consideration is not always shown by teachers. Contracts that are signed by teachers in May are sometimes followed by August resignations.

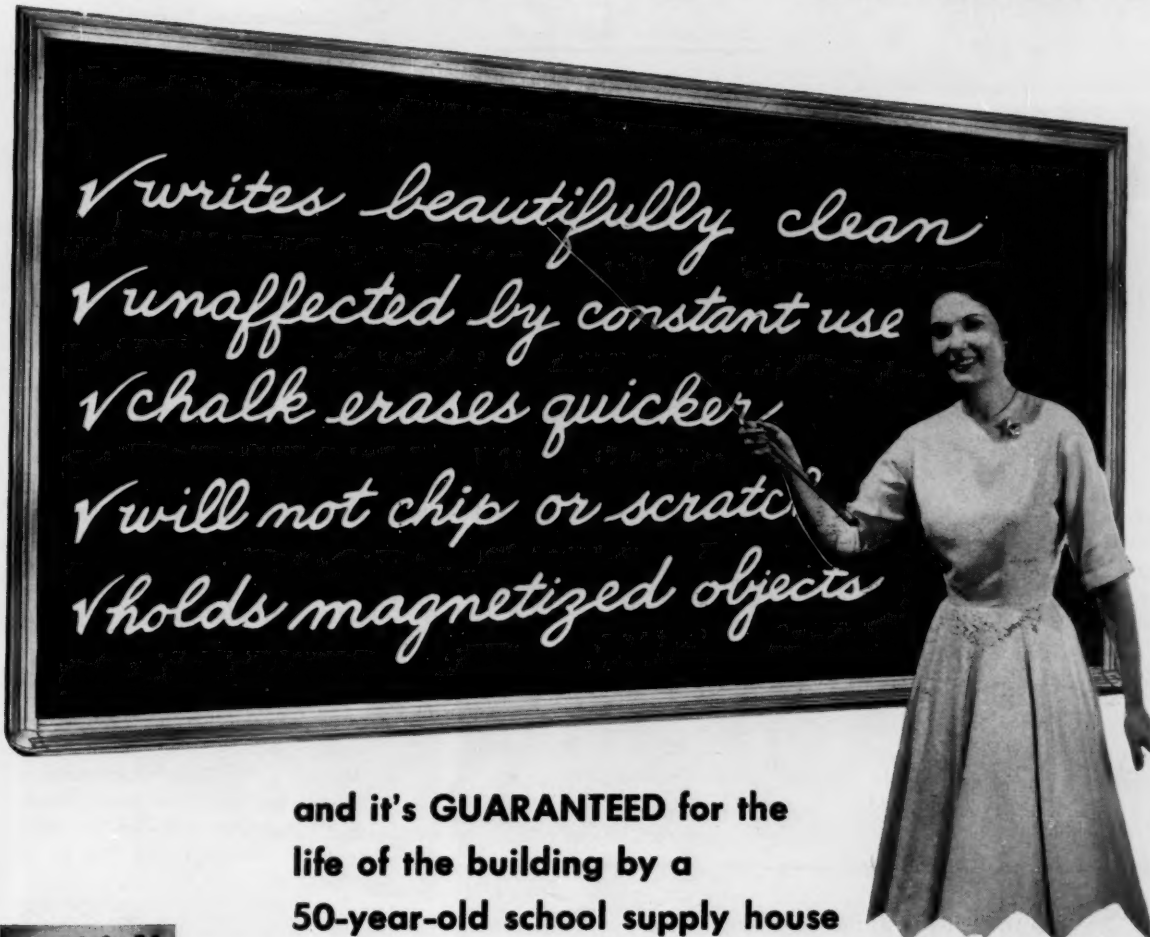
Should penalties be set up for cancellation past the deadline? About 58 per cent definitely said Yes; 26 per cent said No, and 16 per cent were undecided. There seems to be close agreement among respondents that suspension of the teaching certificate in the state for at least a year is a good penalty. Several respondents suggested a fine of \$100; others insisted that the school system be reimbursed for their procurement of a suitable replacement.

A Pennsylvania superintendent states that any penalty imposed for cancellation of a contract should be included clearly in the terms of the contract. But in order to make the penalty "stick," a Wisconsin respondent interposes, the contract must also include a bonus for fulfillment.

Wouldn't Change Code

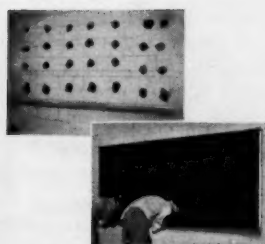
When asked whether the code of ethics should be changed so that a position could be offered to a teacher who is under contract to another school district, more than a half of the respondents (53 per cent) said No; less than a third (31 per cent) said Yes, and almost one-sixth (16 per cent) did not comment. Those who favor changing the code of ethics, however, are emphatic about a deadline beyond which it would be unethical to "go shopping."

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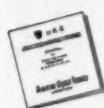
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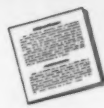
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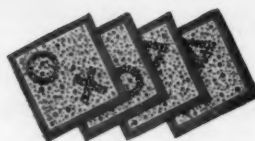
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Two Cockroaches Required, Mr. Spinning Makes Clear

Dear Editor:

Is yours really so much a family magazine that delicacy will not permit you to accord to the cockroaches what is so generally and so freely attributed to the birds and bees?

I refer to page 9 of the June 1958 issue and the advertisement of West Chemical Products, Inc., where "One cockroach means a hazard of 4500."

Maybe your staff biologist is so dry-fogged that he thinks *la cucaracha* is one of the aphidae, insects which admittedly have a certain gift for parthenogenesis. But *my* staff biologist says No — that a *single* cockroach must have had at least one extramarital brush with reality in order to create even one little additional hazard for your clients. Any other theory, he holds, must be based on false conceptions.

I know that schools as well as advertisers are a bit confused about these matters. Serving as consultant on school organization as related to instruction, I once read this sentence on a chalkboard of a third grade platoon section: "The cow is milked two times a day. It does not hurt him to be milked."

For a small fee I was able to suggest that to keep abreast of science and the facts of life, the biology teacher should get married. This was done. While I have not followed this specific situation, I am reasonably sure that her pupils will now at least be able to view Jayne Mansfield in a new, and perhaps functional, light.

At the other end of the educational scale, the confusion is just as bad. When the students of Alfred University sing their alma mater they chant: "Alfred, Mother of Men."

All this, from grades through college and from invertebrates to full-scale vertebrates, strikes me as inadequate preparation for family living in the Twentieth Century.

I am, sir, sorrowfully and relentlessly yours—JAMES M. SPINNING, former superintendent, Rochester, N. Y.

P.S. How about *two* cockroaches?

The NATION'S SCHOOLS

AS A RULE,

SCHOOL-BUILDING WITH

INSULROCK

ADDS UP TO

SIZABLE SAVINGS



Weather-resistant, good-looking INSULROCK used as roof decking provides ceiling for corridor outside classrooms of new Hillcrest High School, Simpsonville, S.C. Architect: Wm. Freeman & Associates; Contractor: Triangle Construction Company, both Greenville, S. C.

Extra schoolrooms may cost nothing extra!

Insulrock Building Slabs, used for load-bearing, long-wearing, incombustible roof decks, sometimes cut building costs enough—by costing much less to buy, apply, maintain—to help build extra rooms without extra appropriations.

Extra safety never costs extra!

Incombustible Insulrock minimizes fire hazard for roofs, partitions, ceilings. It's "weather-cured," weather-resistant, strong, unharmed by insects and fungi. Its soft, off-white ceiling finish reduces glare, increases lighting efficiency, protects children's eyesight.

Extra comfort—no extra cost added!

Insulrock, honeycombed by thousands of sound-trapping air pockets, provides acoustical ceilings that reduce room noise, clatter, and confusion by at least 80%. Insulrock insulates from temperature extremes, summer and winter.

Plus bonus ceilings that Insulrock always gives!

Use Insulrock, top-side, for roof deck. Use the same slabs, underside, as exposed, attractive acoustical ceiling. So ceiling really is free!

Write for free Insulrock folder detailing how this most modern, economical building material meets UL standards, applies easily to any surface year 'round, and is today's jack-of-all-jobs for architects, builders, building planners, building committees.



Division of
The Flintkote Company



Insulrock®

INSULROCK COMPANY

Sales Office, EAST RUTHERFORD, NEW JERSEY

Plants: LINDEN, NEW JERSEY • RICHMOND, VIRGINIA • NORTH JUDSON, INDIANA

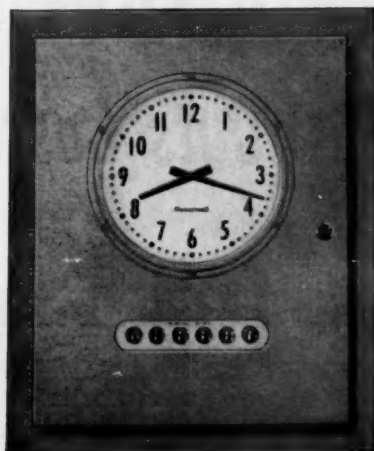
Now, from Honeywell, leader



Making schools better is this man's job!

He's the Honeywell man who works closely with your architect and builder to see that your Honeywell control systems are properly applied and installed. His responsibility never ends either, because he, and thousands of Honeywell men like him, are ready to give you instant, expert service from 112 service offices—as close as your phone.

in school control systems,



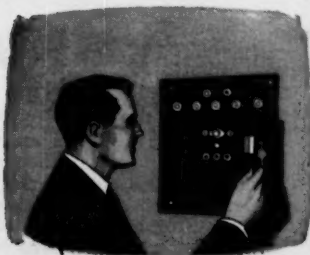
Honeywell Clockmaster Systems

- Provide handsome clocks in 9", 12", 15" or 18" dials, flush or surface mounted.
- Easy installation—standard plug-and-socket connections. No soldering.
- Simplified link-chain programming. Easy to read, understand, set. Trouble-free.
- Optional spring-reserve power unit. Keeps master clock running during power failure.
- Signal duration easily varied. Surface switch permits signal duration 2 to 25 seconds.

THE HONEYWELL CLOCKMASTER*

The Clockmaster, Honeywell's newest addition to its line of electrical systems for schools, represents another important step in Honeywell's overall program for schools. The program itself is based on Honeywell's thorough appreciation of schools' operational needs and is primarily designed to permit better education by providing the finest control facilities in school plants.

Now with the Honeywell systems shown on this page, your school gets the special benefits that only Honeywell can give: 1) your school management benefits from simplified operational functions; 2) your student body benefits from a better, more flexible learning environment; and 3) your taxpayers benefit from the performance and durability of quality products tailored to fit your school's particular needs. In addition Honeywell offers the most comprehensive maintenance program in the industry—periodic inspections, emergency service and the replacement of worn equipment. For more complete details on any of Honeywell's electrical systems for schools, call your local Honeywell office or write Minneapolis-Honeywell, Dept. NS-9-133, Minneapolis 8, Minnesota.



Honeywell Fire Detection and Alarm System

- Locates fire by numbered light.
- Reports fires automatically both within building and to local fire station.
- Transmits alarms even with ground or break in detection circuit.
- Operates on stand-by battery in case of power failure.
- Easy to install. Detectors fit standard 3" box or plaster ring.

*Trademark



Honeywell Light-Saver*

- Phototubes and control panel automatically turn artificial lights on and off as needed to supplement daylight.
- Tests prove savings as high as 80% on lighting bills.
- Helps teacher use natural lighting to fullest advantage.
- Honeywell helps with application and installation.
- Honeywell offers lifetime maintenance contract.

Honeywell



First in Control

SCHOOLS DISCOVER... NEW **IDEAL FOR NEW CONSTRUCTION...**

Reduces Installation Time...Cuts Costs!



SCHOOLS...HOSPITALS...COMMERCIAL BUILDINGS

Now every school, hospital and commercial building can have easy-to-care-for, low maintenance ceramic tile walls and floors in corridors and other areas. New Suntile SETFAST Wall Tile and Suntile SETFAST Floor Tile install quickly (large 2' x 1' sheets), permanently (with new approved adhesive), economically (reduces installation time appreciably) in new construction or over existing solid walls in modernization programs. Schools built with unfinished masonry walls find Suntile SETFAST the answer to wall maintenance problems.

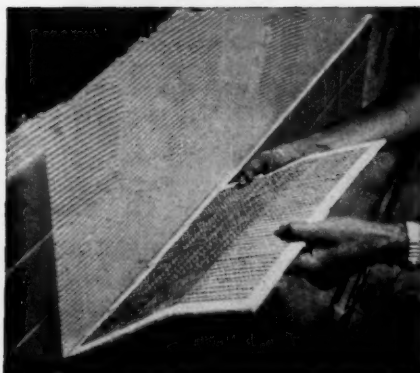
Suntile SETFAST now available in many Wall Tile sizes

Suntile SETFAST tiles are pre-bonded on durable fiber that strengthens tile-to-wall bond like the ribs in reinforced concrete... and provides an additional safety factor for vibration, structural shifts and temperature changes!

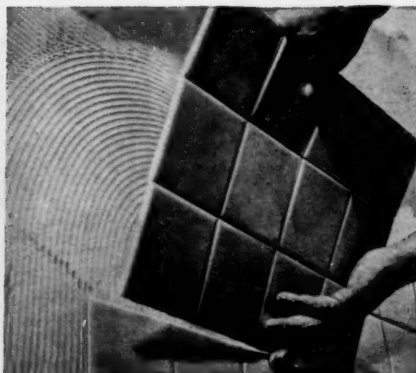
Suntile SETFAST mounted wall tiles are now available in the following tile sizes: 4 1/4" x 8 1/4", 4 1/4" x 6" and 4 1/4" x 4 1/4" wall tiles.

Suntile SETFAST* Wall Tile AND MODERNIZATION PROGRAMS

Installs easily over existing walls!



FAST INSTALLATION — Ideally suited for thin-set installation method using either an approved adhesive or self-curing mortar. SETFAST may be installed over mortar beds of conventional thickness skimmed with self-curing cement. No soaking required!



MODERN ECONOMY — 12-tile, factory inspected units cover $1\frac{1}{2}$ sq. ft. Individual operations reduced.



PERFECT SPACING — beautifully precise, automatic alignment and easy handling. SETFAST Wall Tile is self-leveling . . . and conforms to minor irregularities in existing wall surface!

Suntile SETFAST Ceramics

— in one-by-two foot sheets offer you design versatility with unheard of economy!

Mechanic sets 288 one-by-one inch ceramics at once, perfectly bonded and spaced. He can inspect his work, avoid error, because he installs ceramics *face up*.

No paper to soak off, no mess to clean. Tile can be grouted immediately!

SETFAST ceramic patterns encourage originality in floor and wall design — patterns, geometrics, abstracts, and randoms.

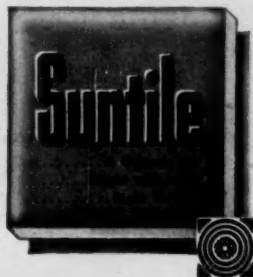
Available from stock, including the famous, exclusive Max Spivak motifs! Send for catalog.

CAN OUR SPECIAL DESIGN STAFF HELP YOU?

Our ceramic artists, headed by Harry J. Macke, will be glad to suggest tile applications to your plans or elevations; or put your own tile designs in layout form.



*Patent Pending



THE CAMBRIDGE TILE MFG. CO.

P.O. Box 71, Cincinnati 15, Ohio

Send me folders and data on Suntile SETFAST Wall Tile and Ceramics.

Name

Address

City State

it's

RIXSON

throughout

AT LASALLE HIGH SCHOOL



LaSalle Senior High School, Niagara Falls, N.Y. Sargent-Webster-Crenshaw & Folley, Syracuse, N.Y.—architects. Cannon, Thiele, Betz & Cannon, Niagara Falls, N.Y.—associate architects.

nearly 400 doors pivotal hung offset style . . . an achievement in modern uniformity

In keeping with the contemporary design of this outstandingly well planned high school, all of the doors have a uniform simplicity in hanging style. Regardless of the door's function or size, a suitable offset style RIXSON floor type closer or pivot set was specified. Many more RIXSON offset style closers and pivot sets are available for doors ranging from the heaviest lead lined x-ray room door to the lightest interior door. And with each, a variety of top and side jamb pivots for varying problems in construction and material.

write for details and templates of offset type closers

THE OSCAR C. RIXSON COMPANY

9100 west belmont avenue • franklin park, ill.

CANADIAN PLANT: 43 racine rd. • rexdale, ontario



no. 25 closers for entrance, vestibule and other heavy duty doors.



UNI-CHECK closers for classroom and other active light interior doors.



no. 117 1/4 pivot sets for supply room and other inactive doors.

McQUAY

Means Quality

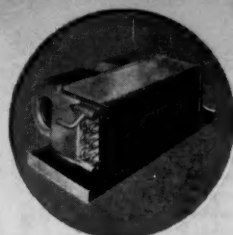
When you think of quality, you automatically think of McQUAY, because McQUAY MEANS QUALITY.

Only McQuay units are equipped with the famous and exclusive Ripple Fin coils which create the maximum air turbulence necessary for efficient heat transfer. Expanding the copper tube against the wide, full fin collars, which act as automatic spacers, provides rigid metal-to-metal contact and completely covers the copper coil to form a "tube within a tube".

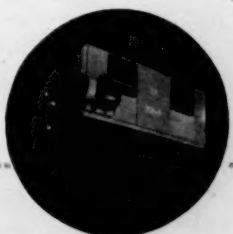
The complete McQuay product line is constructed of the finest heavy gauge materials—combined with the NEW McQuay Galva-Seal process, bonderized and then finished with a special formula enamel baked on—offering you the finest corrosive resistant assembly available. And, the Dura-Frame "V" channel construction, another McQuay exclusive, provides the strength and rigidity necessary to quiet, trouble-free operation.

There is no substitute for quality, no substitute for the experience and the research and engineering for which McQuay is famous.

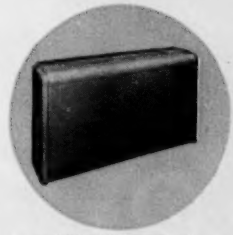
Compare McQuay in every way—from the appearance and beauty of the finished product to the heart of each unit, the coil itself—and you will readily see why McQUAY MEANS QUALITY—and quality means performance and long life. McQuay, Inc., 1640 Broadway Street N.E., Minneapolis 13, Minnesota.



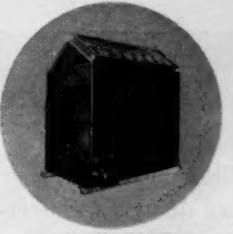
HIDEAWAY SEASONMAKER



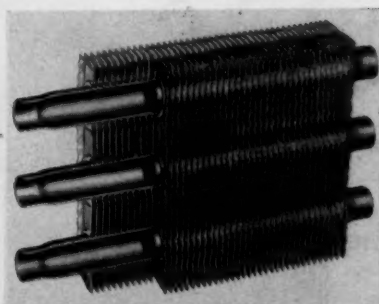
SEASONMASTER AIR CONDITIONER



INDIVIDUAL ROOM SEASONMAKER



MULTI-ZONE AIR CONDITIONING UNIT



RIPPLE FIN COIL CONSTRUCTION

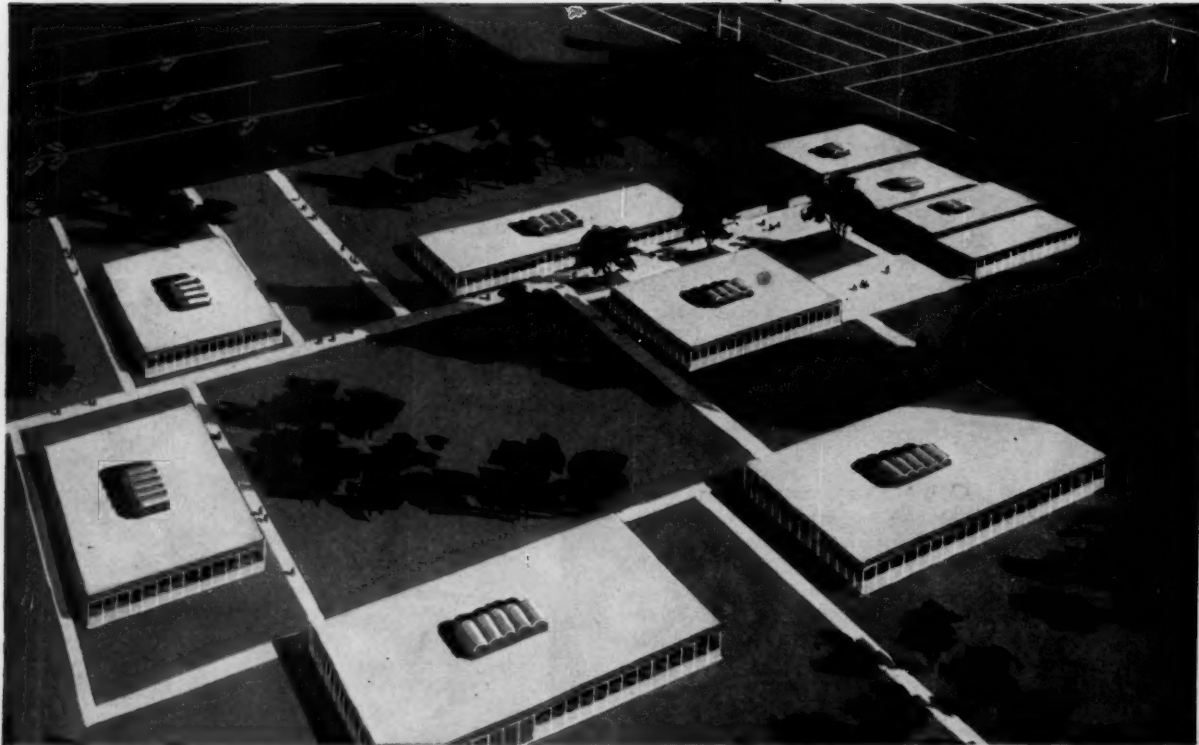
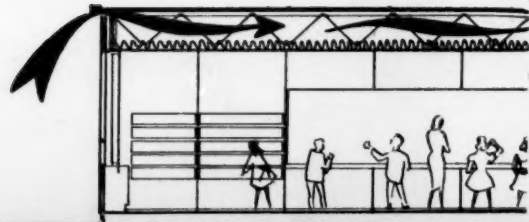


DURA-FRAME "V" CHANNEL CONSTRUCTION

McQuay
Means Quality



Campus plan provides several classroom units plus gymnasium, cafeteria, auditorium, and other specialized facilities. Heating for all buildings is "powered" from a central steam plant working through hot water converters in the individual buildings. Air conditioning can be added on a building-at-a-time basis.



Number five
of a series . . .

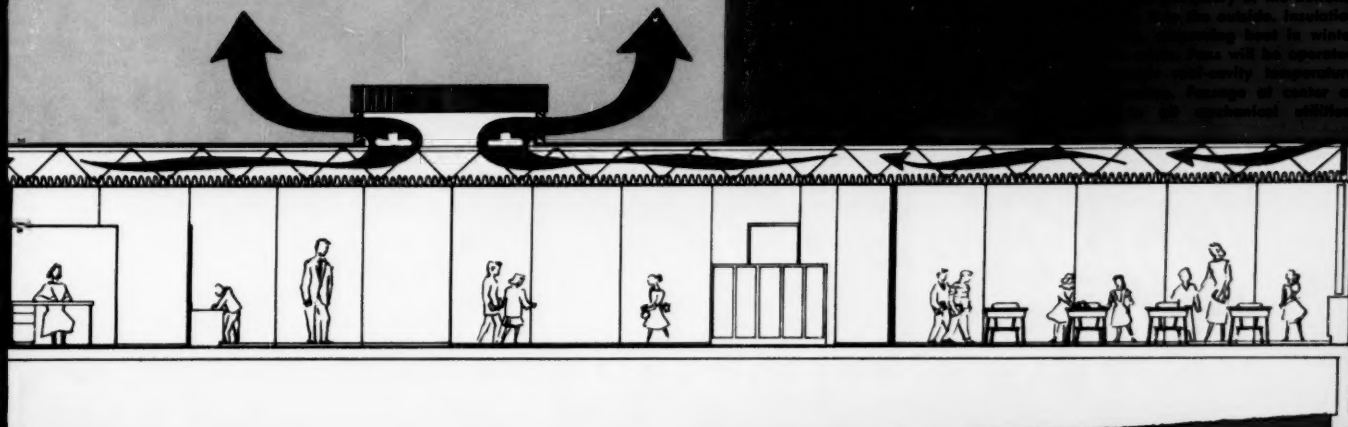
The herman nelson file of

CLASSROOM AIR CONDITIONING more and more is becoming an important factor in school design. Architects everywhere are recognizing the trend in their structural considerations for school buildings.

Educators, too, are thinking—talking—stressing air conditioning. They have found that classroom temperature, air movement and humidity have a direct bearing on learning and development. They realize that it is just as important that a child be comfortable in hot weather as in wintertime.

For these reasons, many schools are already air conditioned, or are planning for it in the future. Throughout the country, the need for air conditioning is being reflected again and again in basic school design. The building plan shown on these pages is an outstanding example.

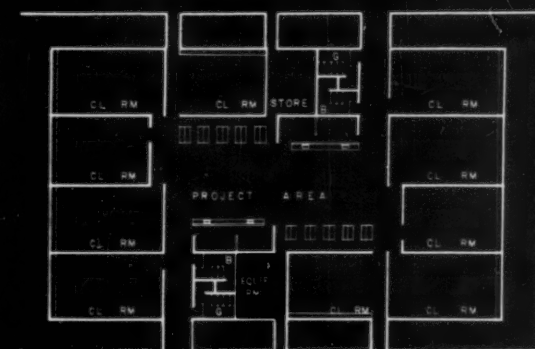




Michigan architects prove air conditioning compatible with campus-plan school

This unique school is another outstanding example of architectural design innovations for air conditioned schools. Provision for future air conditioning was an important part of the planning in the design of this campus-plan high school near Lansing by Laitala & Nuechterlein Associates.

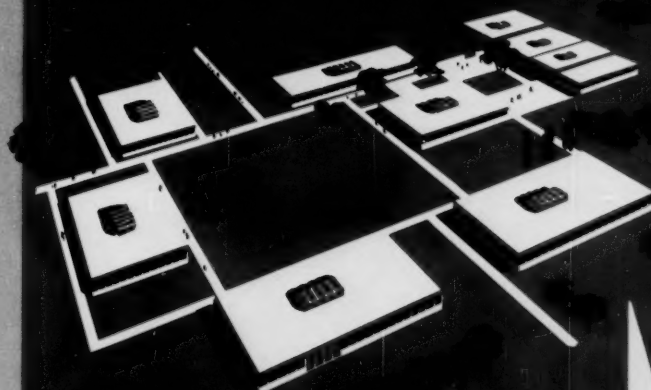
Penthouse fans draw air from the entire periphery of the building through the open-truss roof. This forms a cooling "shield" against roof solar heat gain by eliminating thermal lag in roof insulation, results in smaller chillers, lower operating costs.



air conditioned school design

A central steam plant supplies all of the building units—classroom buildings, gymnasium, cafeteria, auditorium—with steam. The steam is converted to hot water by converters in each of the individual buildings. Air conditioning can be added in any of the buildings at any time simply by installing chillers in the individual equipment rooms.

Flexibility is another important design feature of this school. The various buildings are subdivided with demountable partitions and can be modified to keep pace with changing conditions. Piping system is designed so that the air conditioning unit ventilators are equally flexible.



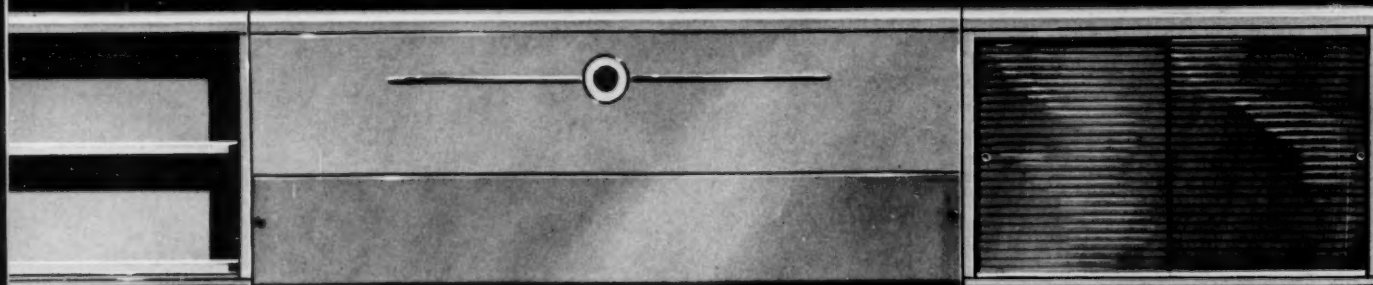
AAE

herman nelson

hermel-cool II

UNIT VENTILATOR

with optional air conditioning



already selected by more than ¹⁵⁰~~100~~ schools

Will the school you are planning ever need air conditioning? The answer is definitely—yes. Architects and educators agree on the importance of the proper learning environment. And only air conditioning can assure that your school will have it when the weather outside is warm.

That's why today—less than a year after its introduction—the HerNel-Cool II unit ventilator with optional air conditioning has been selected for use in more than 150 schools, which are either air conditioned now or have planned for it.

HerNel-Cool II is the first unit ventilator to offer optional air conditioning, as well as heating, ventilating and natural cooling (with outside air). Units can be installed so the school enjoys the usual bene-

fits of Herman Nelson unit ventilation, including the famous DRAFT|STOP system—the only type of draft control that is compatible with air conditioning. Then at any time—immediately, or whenever the school budget will allow it—the mere addition of a chiller in the boiler room is all that is needed for complete hot weather air conditioning.

This can be accomplished without disruption of classroom activities... without expensive alteration and installation charges. The cost is far less than for separate heating and air conditioning systems—both for installation and operation.

Want information? Write today to Herman Nelson Unit Ventilator Products, American Air Conditioning Company, Inc., 215 Central Ave., Lexington, Mass.



AAE

herman nelson

UNIT VENTILATOR PRODUCTS

Systems of Classroom Cooling, Heating and Ventilation

JUST HOW MUCH DOES PROVISION FOR FUTURE CLASSROOM AIR CONDITIONING COST? The answer is: probably far less than you think—when you install HerNel-Cool II air conditioning unit ventilators. Actually, it costs only fifteen to twenty cents per square foot more than the cost of basic heating and ventilating equipment in average new construction—or between one and two percent of total building cost. Complete, immediate air conditioning is approximately fifty to fifty-five cents more.

By using Herman Nelson unit ventilators, schools have held heating and ventilating costs—including provision for future air-conditioning—to a total of less than \$1.35 per square foot. Other schools have heating, ventilating and immediate air conditioning—for a total per square foot cost of less than \$1.70! (And, in many cases traditional design concepts were used.) These are current costs, too! HerNel-Cool II unit ventilators have been available for little more than a year.

Look at the costs shown below. They are particularly interesting when you realize that they are truly representative—for Herman Nelson equipped schools in all parts of the coun-

School	Total Cost	Total Cost Per Sq. Ft.	Heating & Ventilating Cost Per Sq. Ft.	Per Cent of Total Cost
A	\$ 659,000	\$15.33	\$1.15	7.6
B	416,211	9.05	1.13	12.4
C	435,270	11.21	1.48	13.2
D	131,223	9.00	1.98	22.0
E	260,164	13.56	1.47	10.9
F	1,013,960	11.27	1.25	11.1
G	577,193	8.39	1.07	12.9
H	310,178	9.84	1.05	10.7
I	344,291	10.43	1.11	10.7
J	118,147	12.38	2.09	16.6
Average	\$ 426,564	\$11.05	\$1.38	12.8

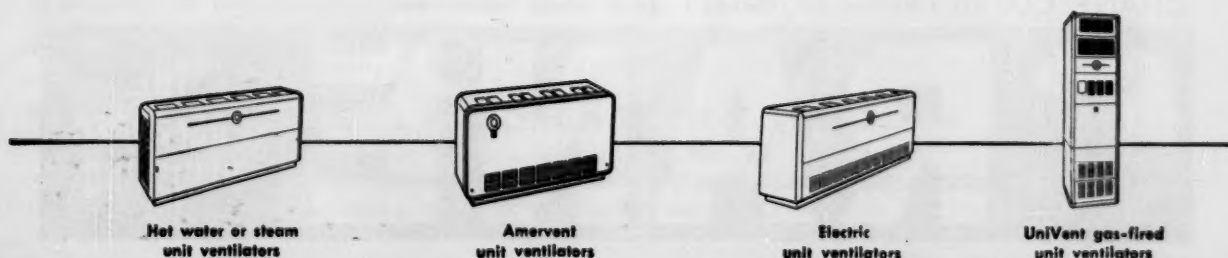
School	Total Cost	Total Cost Per Sq. Ft.	Heating & Ventilating Cost Per Sq. Ft.	Per Cent of Total Cost
K	\$ 666,000	\$15.49	\$1.32	8.5
L	423,511	9.21	1.29	14.0
M	356,800	10.04	1.55	15.4
N	2,813,000	15.44	1.78	11.5
O	2,745,381	16.54	1.76	10.7
P	1,311,000	10.40	1.55	14.9
Q	500,000	15.63	1.72	11.0
Average	\$1,259,385	\$13.25	\$1.57	12.3
Avg. add. cost provisions for future air conditioning...0.19				

School	Total Cost	Total Cost Per Sq. Ft.	Heating & Ventilating & Air Conditioning Cost Per Sq. Ft.	Per Cent of Total Cost
R	\$ 690,000	\$16.04	\$1.88	11.7
S	371,100	10.44	1.95	18.7
T	406,463	14.38	2.41	16.8
U	360,700	13.11	2.22	16.9
V	1,094,387	11.55	1.68	13.8
Average	\$ 584,530	\$13.10	\$2.01	15.6
Average added cost for complete air conditioning...0.71				

try. Locations range from California to New York, from Wisconsin to Georgia.

Complete cost studies—for schools employing immediate air conditioning as well as for those which are planning for its installation later—are available upon request.

Get all the facts now. Classroom air conditioning—immediate or eventual—is being included in more and more school planning. You'll want to consider it in yours. Write today to Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., 215 Central Avenue, Louisville 8, Kentucky. In Canada: American Air Filter of Canada, Ltd., Montreal 9, Quebec.

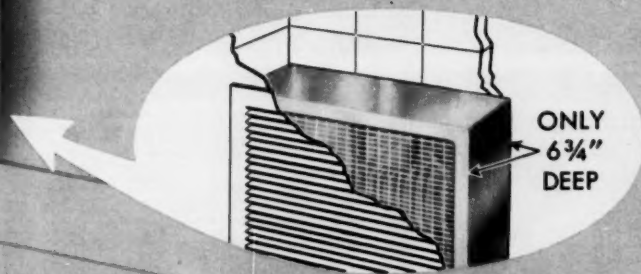


In-the-wall water cooler

— doesn't block the hall



CRANE COOLBROOK FOUNTAIN mounted "in the wall" over a Wal-Pak chilling unit. Gleaming vitreous china with elevated Purflo bubbler. Semi-recessed projects only 7 $\frac{3}{4}$ ".



The Crane Clearstream, a durable vitreous china fountain. Projects 13". Automatic stream regulator prevents splashing.

This compact Crane Wal-Pak chilling unit is just 6 $\frac{3}{4}$ " deep to fit in a standard 8" wall

Here's the modern way to provide sanitary chilled water without giving up an inch of corridor space to bulky coolers.

This compact Crane Wal-Pak unit isn't much bigger than a suit box. It fits in an 8-inch wall behind an attractive grille and comes in low-cost models for 1 or 2 fountains. (Crane also offers central packaged water coolers for servicing up to 60 fountains.)

Crane offers the most complete line of drinking fountains. Every popular indoor and outdoor type, including the china pedestal type. They're styled by Henry Dreyfuss, made of finest vitreous china in 7 colors and white, and designed to surpass sanitary codes. And they're built to withstand the heavy usage they're sure to get.

Ask your architect about Crane fountains and water chillers.

CRANE CO. 836 S. Michigan Ave., Chicago 5 • VALVES • FITTINGS • PIPE • PLUMBING • KITCHENS • HEATING • AIR CONDITIONING

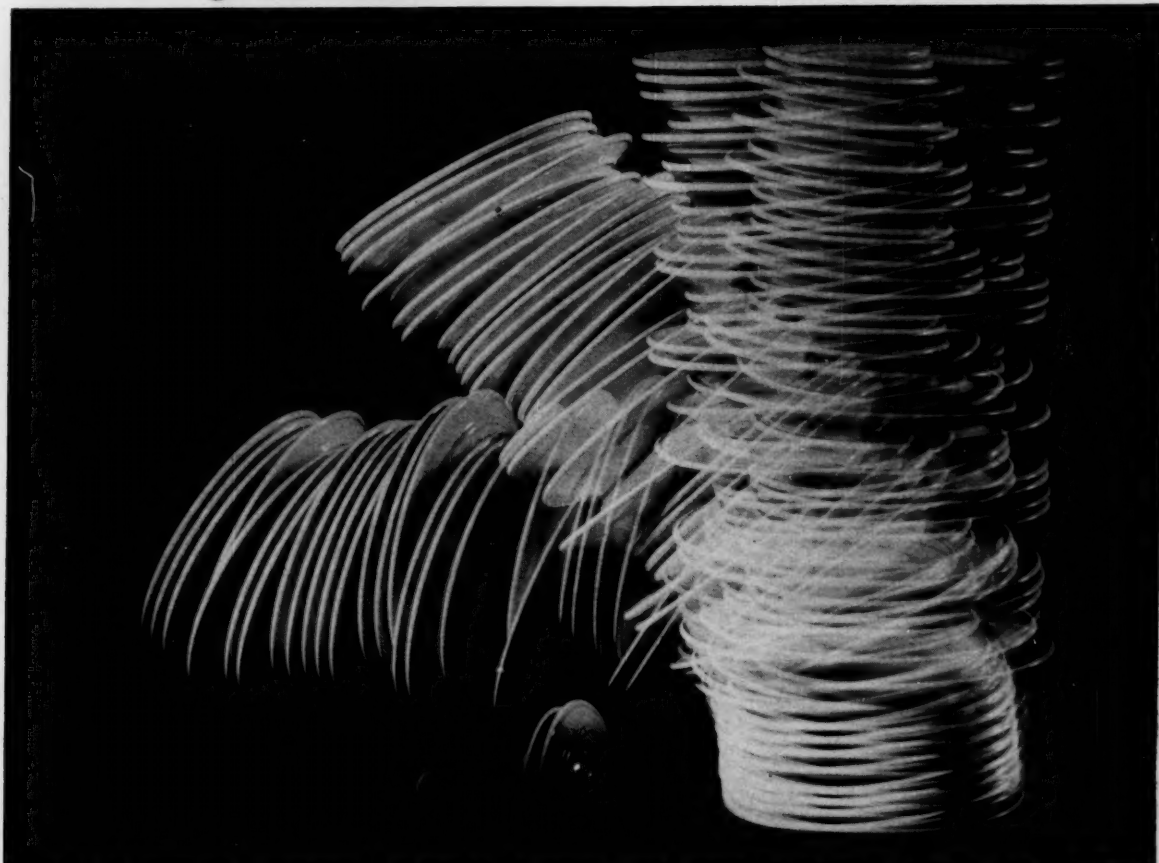
CRANE

THE
PREFERRED
PLUMBING

For additional information, use postcard on page 161.

The NATION'S SCHOOLS

Nothing Costs More than Carelessness



Nothing Satisfies Like Scientific Cleanliness!



Automatic Rinse Injector . . . fits any machine!

FROM **EL** RESEARCH CHEMISTS

Accurate Rinse Injector Cuts Costs 25%

Drymaster adds exactly the right amount of Rinse Dry to water automatically. Glasses, silverware, dishes come out bone dry and sparkling every time. Eliminates toweling. Cuts handling and breakage as much as 25%. Fits any dish machine. Guaranteed. Automatic.

FROM **EL** DISHROOM ENGINEERS

Sure protection for your investment!

For years, EL Dishroom Engineers have helped owners and operators save money by putting science to work. One operator recently started saving over \$3,000 a month. This knowledge is yours —without charge. Don't let the savings slip away!

ECONOMICS LABORATORY, INC.

In Canada, Economics Laboratory (Canada) limited ★ In Sweden, Soilax AB

Domestic and Latin American Sales Offices: 250 Park Ave., New York 17, N. Y.

Get rid of disturbing noise



Johns-Manville Sanacoustic absorbs up to 90% of room noise that strikes it.

Johns-Manville Acoustical Ceilings cost less installed than 10 years ago

Yes—the cost of a J-M Sanacoustic® Ceiling is lower than 10 years ago! This is practically unheard of in today's economy. Yet it is true in the case of Sanacoustic—the finest in acoustical ceilings. And you gain these advantages: Sound-absorbing mineral-wool pads within perforated metal units; A baked enamel finish

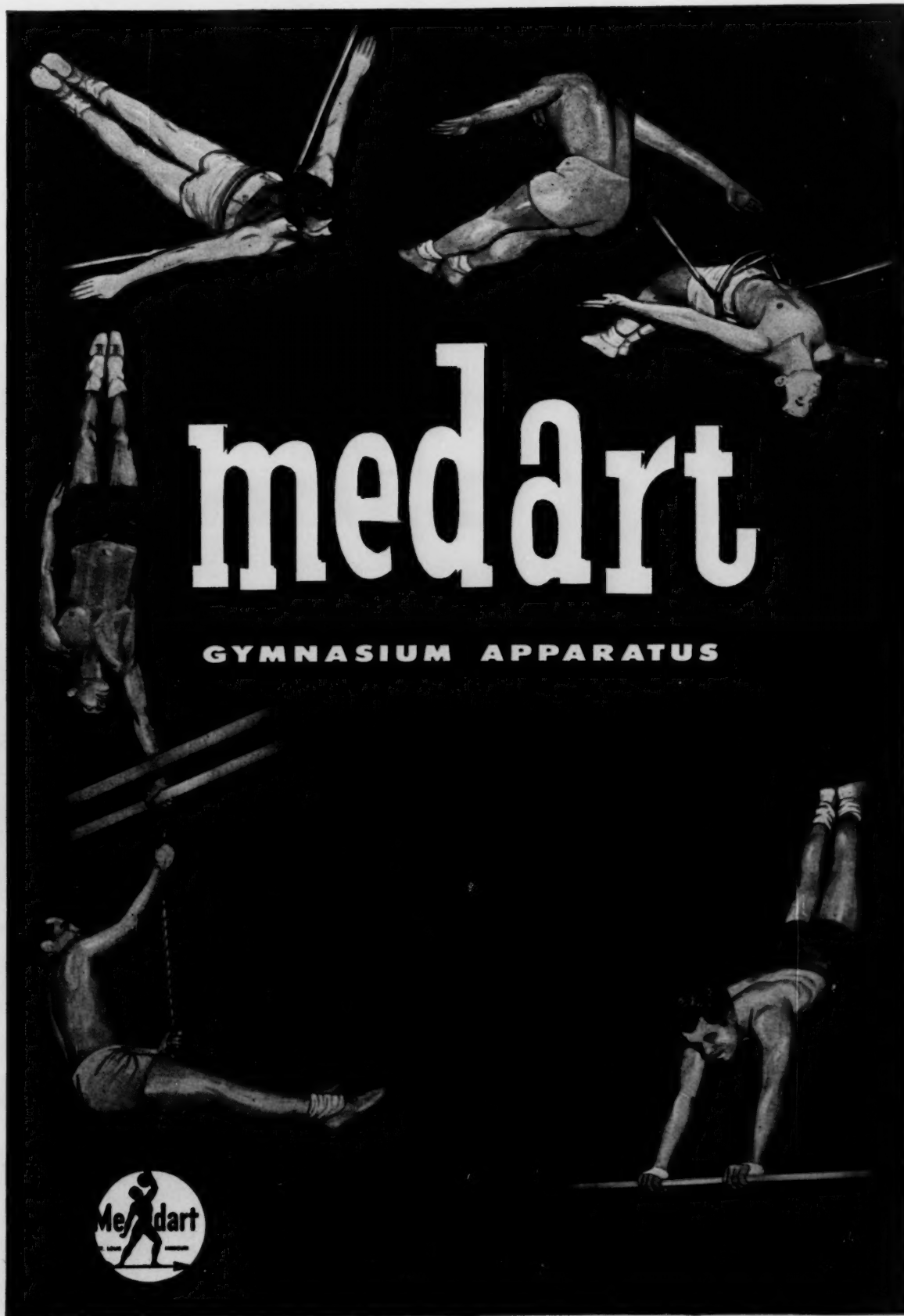
that cleans easily; Units that snap into tee bars for tight, firm joints; A ceiling that has high light reflection and is noncombustible.

For data on all J-M acoustical ceilings send for free booklet "SOUND CONTROL." Write Johns-Manville, Box 158, New York 16, New York. In Canada: Port Credit, Ontario.



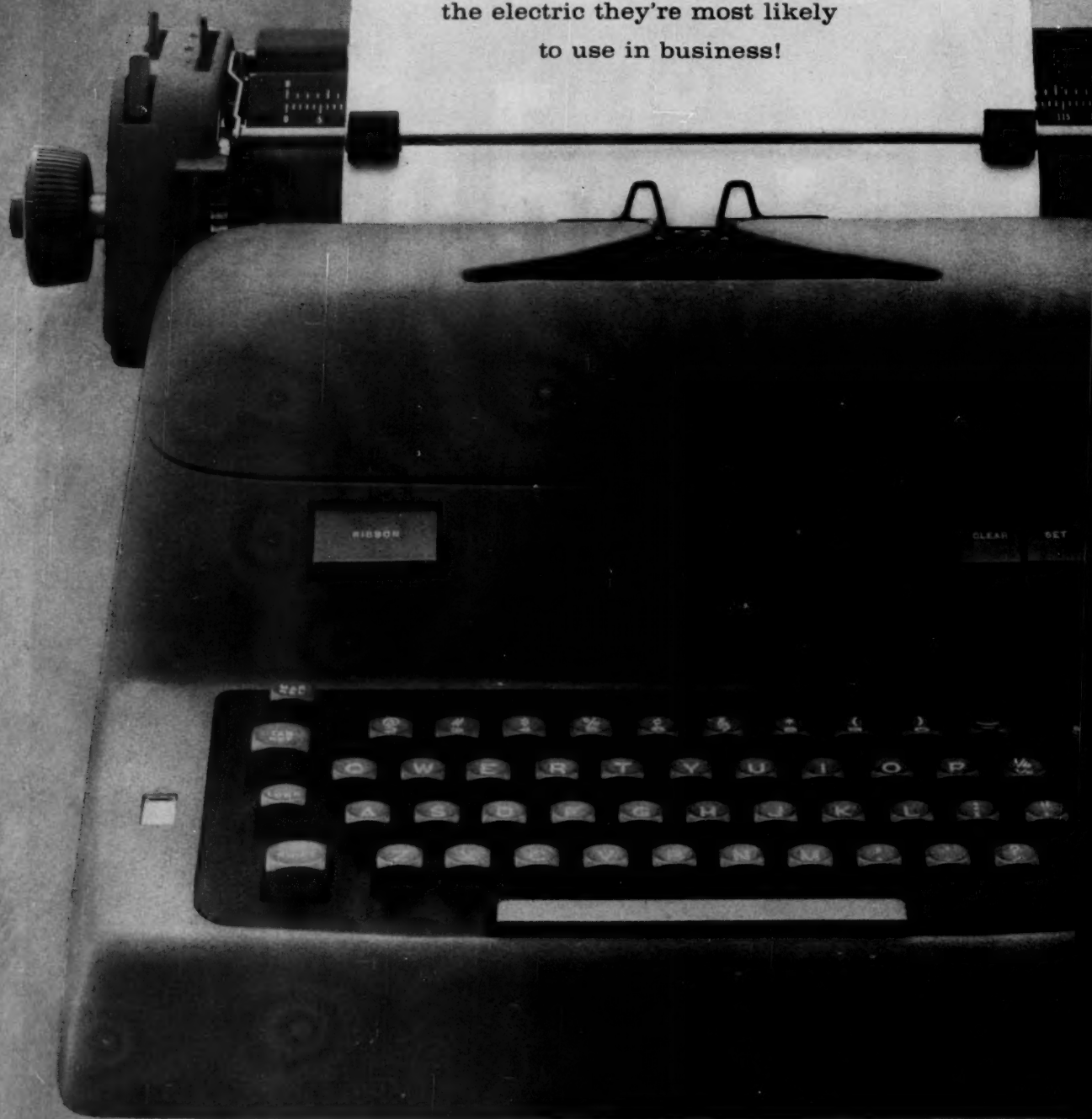
JOHNS-MANVILLE





prena

For the finest typing preparation
train your students on the IBM—
the electric they're most likely
to use in business!



25 YEARS AGO IBM introduced its first electric typewriter...

ration



From classroom to office, the switch is to electrics—and IBM is the favorite by far!



Today more and more businessmen are switching to electric typewriters because they're assured of better, more distinguished typing. And the IBM is the favorite by far! That's why, for future jobs in the business world, student training on an IBM is very important.

And since the IBM is the simplest electric in design and operation—the most dependable in performance . . . school administrators will find its maintenance cost is amazingly low.

Your IBM representative will show you the surprisingly low per-student cost of IBM Electrics for your school. Why not call him today?



IBM

**ELECTRIC
TYPEWRITERS**

this year IBM continues its leadership with its one millionth electric typewriter!



Put "More Light on the Subject" with the
NEW! School Master 750 and 500
Greater Brilliance on Any Screen for More Vivid Projection
of Educational Filmstrip and Slide Material

Again, the famous School Master series offers educators a new projector series for increasing presentation effectiveness of visual material. Whether you choose the new 750 or the new 500 you are assured of the greatest brilliance ever achieved from a classroom projector. Increased brilliance—coupled with other famous School Master features—makes your choice of projectors an easy one.

All School Master projectors are completely self-contained—change from filmstrip to slides in a matter of seconds without adding or removing parts.

Whether you select the 750, 750RC, 500 or 500RC, you obtain a projector with "brilliance-ability" never approached by previous models—each projector is equipped with a new Sylvania Tru-Focus lamp, assuring you of proper lamp alignment all of the time.

The School Master 750RC and 500RC provide facility for remote control operation—permit the instructor to face the class and still maintain control of the material being projected.

The School Master 750 is priced at \$99.50; the 750RC at \$134.50; the 500 at \$84.50; and the 500RC at \$119.50. The projector illustrated shows the accessory Rewind Take-up, priced at \$7.50—fits all School Master projectors.

For additional information on the 750, the new School Master 500 and 500RC, and School Master accessories, please write: Dept. NS-93, Graflex, Inc., Rochester 3, N.Y. A subsidiary of General Precision Equipment Corporation. Prices include federal tax and are subject to change without notice.



MORE DEPENDABLE!



NEW WESTINGHOUSE WATER COOLERS

BUILT TO STAND UP under rugged school use where other water coolers fail . . . a Westinghouse gives extra years of trouble-free service. *Inside . . .* a dependable Free-Flow Water Valve and Hermetically-sealed Refrigeration System eliminate leaks, reduce upkeep. *Outside . . .* the non-breakable Stainless-steel Top, scuff-proof Bonderized Steel Cabinet and jam-proof Foot Pedal Control take the roughest kind of treatment without showing it.

AND FOR GREATER CONVENIENCE there is Dual Drink Control—both finger-tip and toe-tip operation at no extra cost. A fountain attachment for either side is also available for small children to use. Modern schools call for Westinghouse Water Coolers. Make your selection from 19 handsome models. Call your Westinghouse Water Cooler Distributor listed in the Yellow Pages. Or mail coupon today.

**YOU CAN BE
SURE... IF IT'S** **Westinghouse**

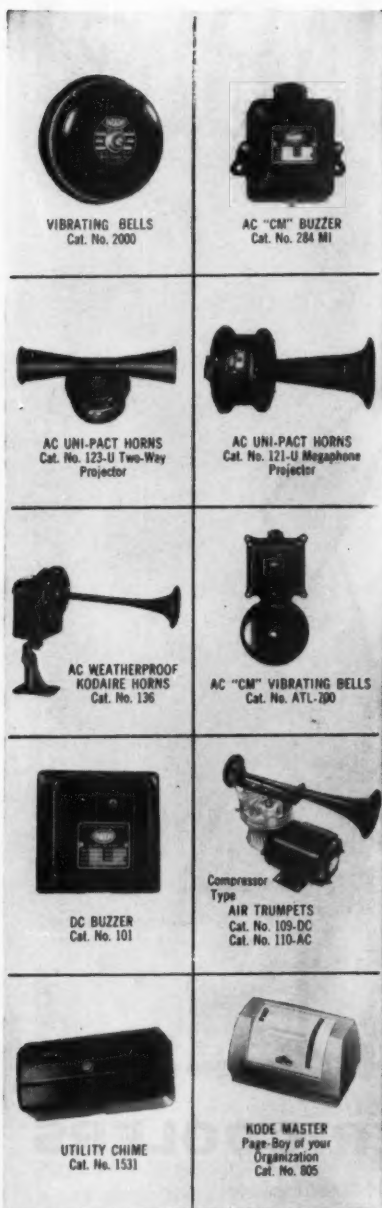
New! Westinghouse HOT and COLD
for rest periods in faculty lounges.
Serves piping hot water for instant
coffee, tea, soups, cocoa, and cold
water too!



Westinghouse Electric Corp., Dept. N59
Refrigeration Specialties Division
Springfield 2, Massachusetts

Gentlemen: Please send me your free booklet which shows how Westinghouse Water Coolers are "10 Ways Better."

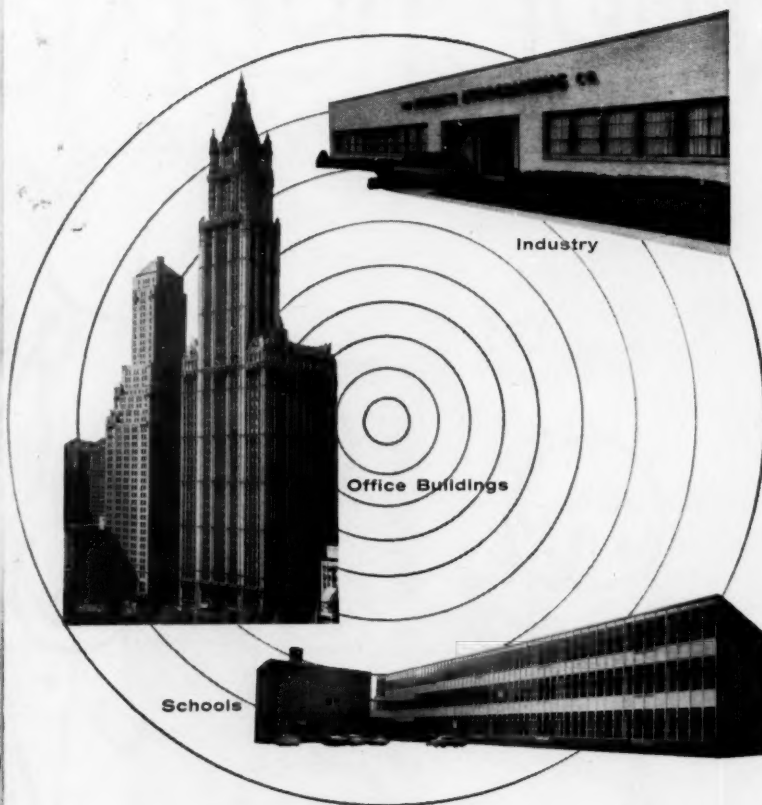
Name _____
School _____
Address _____
City _____ Zone _____ State _____



VISACALL
Closed Circuit TV For Super-
vision of Hospital Patients
Visacall-6



Specialists in: FIRE ALARM SYSTEMS • ELECTRICAL CLOCK SYSTEMS • HOSPITAL PATIENT OBSERVATION • CLOSED CIRCUIT TV • AUDIBLE SIGNALS • ANNUNCIATORS • CODED PAGING SYSTEM • SYNCHRONOUS CLOCKS • TRANSFORMERS • CONTACT DEVICES



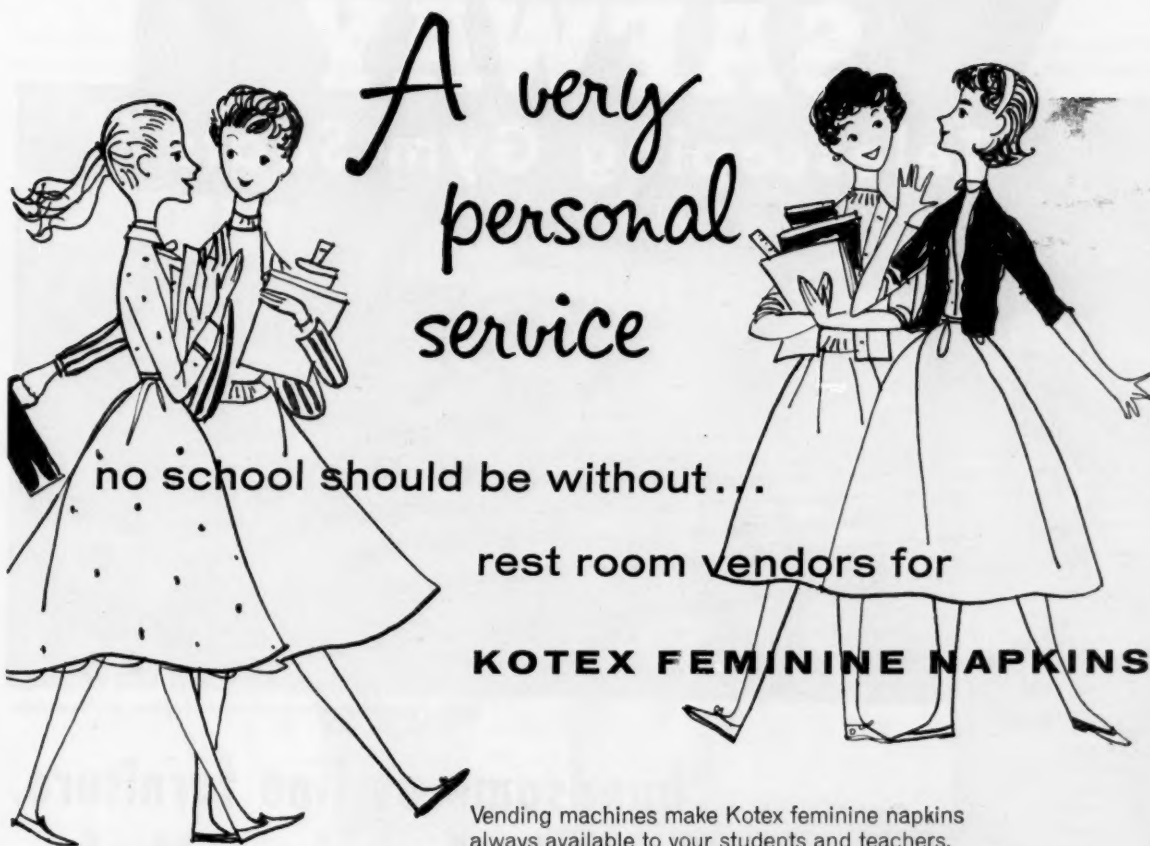
Our business is communications

*... a gentle chime ... a blasting horn ...
or a complete audio-visual communication system*

Sperti Faraday leads in the instant sound or sight communication systems that speed today's business or institutional contacts. Whatever your problem, whether simple or complicated our engineers are at your service to assist you in designing the system that suits your needs.

This service is available to users without obligation. Simply call your nearest Sperti Faraday representative or write to Sperti Faraday, Inc., Adrian, Michigan. In Canada, write Sperti Faraday, Ltd., Montreal.

**SINCE 1875 DESIGNERS AND PRODUCERS
OF VISUAL AND AUDIBLE SIGNALS
Adrian, Michigan**



rest room vendors for

KOTEX FEMININE NAPKINS



The vendor for Kotex feminine napkins is a compact wall cabinet 20" high, 7" wide and only 5" deep with choices of white enamel, satin or polished chrome finishes. Streamlined—easy to install.

KOTEX and WONDERSOFT are trademarks of KIMBERLY-CLARK CORPORATION

Vending machines make Kotex feminine napkins always available to your students and teachers. More than just a convenience, handy coin-operated vendors for Kotex napkins provide a needed and appreciated service. They are available without charge.

When you offer Kotex, you provide the feminine napkin most women prefer. Only Kotex has Wondersoft—the gently spun covering that *won't rub, won't chafe* . . . and Kotex has the extra absorbency that's instant and complete.

Kotex feminine products sponsor, without charge, a complete program on menstrual education for both elementary and high schools. For information fill in and mail the coupon below.

***** CLIP AND MAIL *****

Kimberly-Clark  Corporation,

Department Number NS-98, Neenah, Wisconsin

_____ Please send me further information on vending machine service for Kotex feminine napkins.

_____ Please send information on the Kotex Educational program.

NAME _____

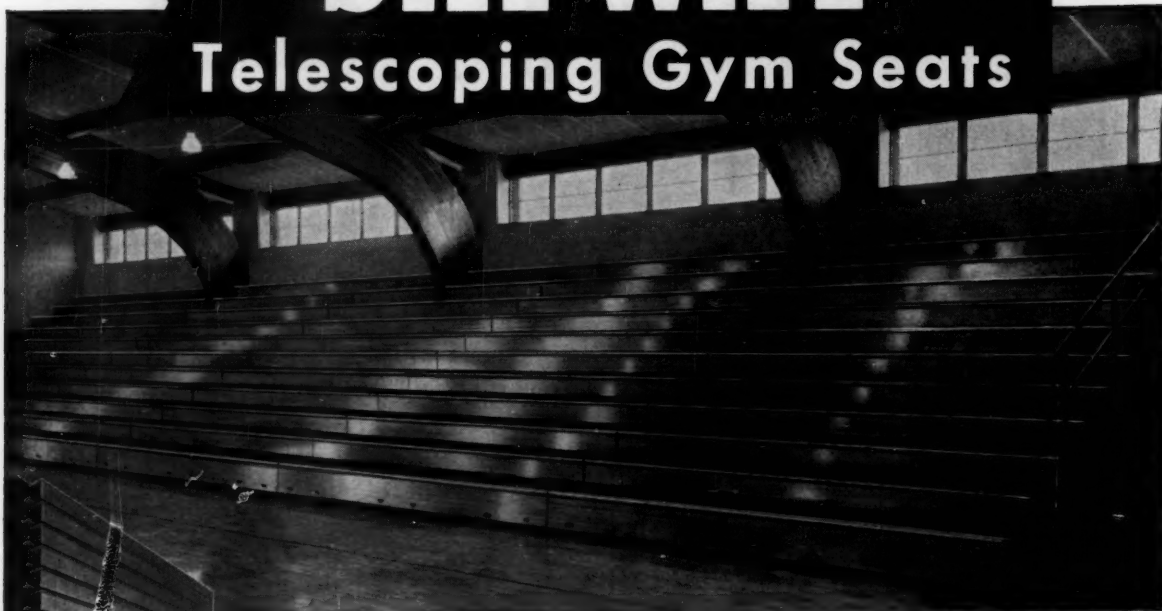
ORGANIZATION _____ TITLE _____

STREET _____

CITY _____ ZONE _____ STATE _____

SAFWAY

Telescoping Gym Seats



Safway gym seats harmonize with the finest surroundings.

**...handsome as fine furniture,
yet sturdy, safe and trouble-free**

YOU'll really be proud of the appearance of your Safway gym seats... proud as you are of the superior vision, comfort and safety they provide for your spectators.

Extended or closed, the all-steel supporting structure is concealed under beautifully finished wood seat boards, foot boards and risers. The handsome natural grain shows through clear varnish, tinted to the rich, warm tone of Golden Oak.

When not in use, Safway gym seats telescope back into a self-contained "cabinet." Riser boards then line up vertically like fine wood panelling to give your gymnasium a clean, finished appearance.

You also benefit through important mechanical advantages built into Safway gym seats:

ALL WOOD IS SPECIALLY FINISHED

Seat, foot and riser boards are laminated Douglas Fir, selected to virtually eliminate cracking or splintering. Boards are carefully sanded and eased on all sides, with corners rounded. There are no sharp projections. Hand holds in the front riser board are smoothly rounded.

For fine appearance and durability, boards are treated with Safway's high quality base sealer and finished in clear Golden Oak varnish. The finish is rich but scuff-resistant... lustrous but not slippery... easy to keep clean. It will harmonize with the finest surroundings.

COMPLETE SPECTATOR COMFORT—Excellent sight lines from every seat. Extra-wide seat and foot boards; ample foot and leg room.

SMOOTH, EASY OPERATION—Safway telescoping principle eliminates binding, minimizes friction. No costly power equipment needed.

STRONG, RIGID CONSTRUCTION—Steel, not wood, carries the load. 8 steel columns under each section row, with horizontal and vertical steel bracing.

SIMPLE, EFFICIENT DESIGN—3 automatic locking devices. 8 self-lubricating wheels under each section row. Extra-long wheel carriages. Minimum of moving parts.

Get Safway recommendations!

Submit your seating requirements for recommendations by experienced Safway engineers. There is no charge for this service. And write today for your free copy of the new Catalog 169.



SAFWAY®

STEEL PRODUCTS, INC.

6233 W. State St., Milwaukee 13, Wis.

COMPLETENESS IS IMPORTANT!

This is the reason more and more school administrators are specifying Virco school furniture. Posture correct seating, proper light values plus modern design and sturdy construction are all embodied in every unit of Virco school furniture you buy. Furthermore, Virco makes a **complete line** of school furniture and folding furniture for use in **kindergarten** through **college**! Write today for our completely illustrated, free catalog, or ask to have a Virco school furniture counsellor call on you. Shown below are the Virco #200 series side chair and our #724 one pupil desk. Virco Manufacturing Corporation, P. O. Box 44846, Station "H", Los Angeles, California; also Conway, Arkansas.

VIRCO





New *SLANT-O-MATIC* by **SINGER**

More than 40,000,000 women are sewing creatively these days! This increased interest in home sewing has added to the importance of *teaching* this lifetime skill . . . teaching it the most modern way.

That is why more and more schools are now investing in the SLANT-O-MATIC—the most modern automatic zigzag machine ever developed.

It's the *latest word* in decorative stitching . . . in construction details such as seam finishing, blind stitching, buttonholing.

Practical, too—it does finer straight stitching, *smoother* because the zigzag

mechanism disengages for straight work . . . *stall-free* due to a gear motor drive.

"Drop-in" bobbin in front of needle . . . built-in threading and stitch charts . . . Slant Needle, angled for easier seeing. These are but a few of the advantages!

Thousands of women already own this SINGER® Sewing Machine. Your students will want it for their homes later on.

Shouldn't your schools keep pace with the growing trend in home sewing, the growing demand for the SLANT-O-MATIC*—*only* automatic zigzag machine for home use made in America.



Stitch Chart flips up showing student how to "tune" knob for all the exquisite fancy stitch combinations. Easiest ever!

Available in choice of SINGER Sewing Desks—
at substantial school discounts.



SINGER SEWING CENTERS

Also headquarters for SINGER® Vacuum Cleaners.

Listed in your phone book under SINGER SEWING MACHINE CO.

*A Trademark of THE SINGER MANUFACTURING CO.



Reading room of Roy O. West Library, DePauw University, Greencastle, Indiana

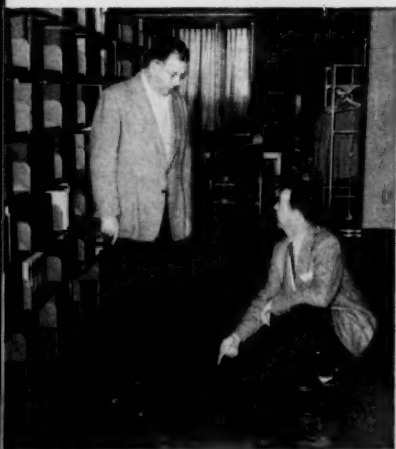
"Wet weather won't harm our Weatherall-protected floors,"

SAYS ART PERRY, DEPAUW'S SUPERINTENDENT OF BUILDINGS AND GROUNDS

Weatherall heavy duty floor wax is just one of Huntington's products that keeps the new Roy O. West Library at DePauw clean and beautiful.


"The floor won't water spot," says Art Perry. That's why he's happy that he chose Huntington Weatherall . . . the heavy duty wax that protects flooring against moisture and is highly resistant to shoe and chair scuffs. It stays bright and blemish free for long periods. A quick buffing restores original beauty.

If you have maintenance problems, ask to see the Man Behind the Drum . . . your Huntington representative. He'll tailor a practical maintenance program for you, based on sound experience, high quality products and personal skill. Call or write today for his name.



"Weatherall's mar-resistant finish is easy to keep glossy. Marks buff right off," says Huntington's Richard F. Hafflich to Art Perry.



HUNTINGTON  LABORATORIES
INCORPORATED

Huntington, Indiana • Philadelphia 35, Pennsylvania • Toronto 2, Ontario

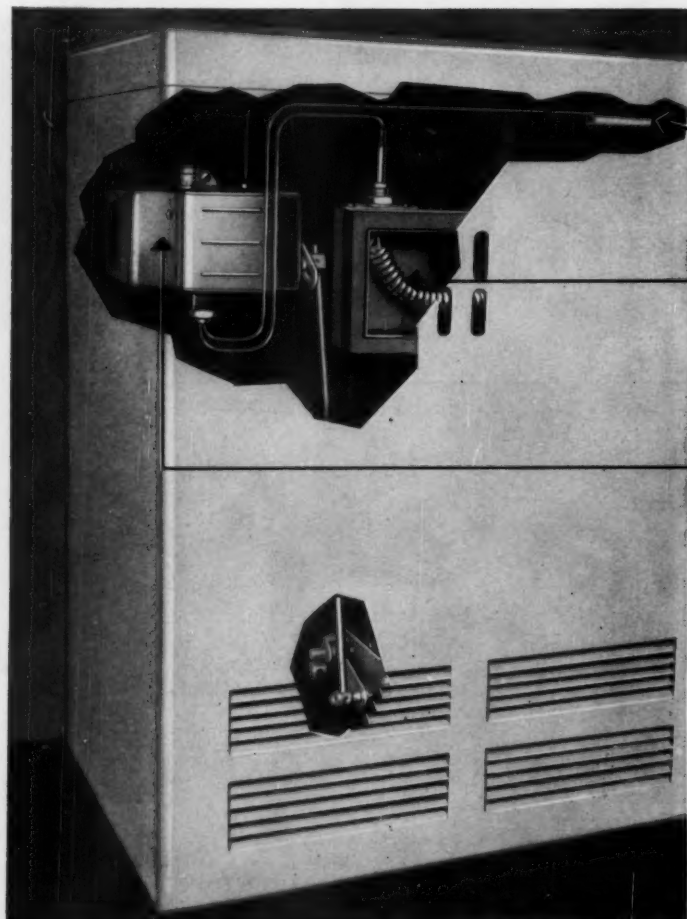
HUNTINGTON

... where research leads to better products

THE MARK OF QUALITY



New unit ventilator control provides greater accuracy, costs less to install!



Temperature sensing bulb in the discharge air stream.

Temperature sensing bulb in the room air sampling chamber.

(Aspirating principle insures exceptionally accurate and responsive control.)

Motor operator, controlled by the integral thermostat, is directly linked to the damper mechanism. This system provides automatically controlled heating and ventilating.

Positive spring return closes the outdoor damper in event of fan shutdown or power interruption.

Dual Element Controller mounts directly on face and bypass units to control heating and ventilating

This new all-electric Barber-Colman control combines the function of thermostat and controller in a single "package." It mounts directly on the unit ventilator, eliminating the need for a wall thermostat and substantially reducing control and installation costs. Factory installation is practical.

As illustrated, the control employs the sampling chamber system available on all face and bypass units. This is the proved aspirating principle

used on the most difficult and exacting laboratory and industrial control jobs. As a result, control accuracy is superior to that of most wall thermostats (location of which is ordinarily a compromise).

For complete information on this outstanding cost-reducing improvement in unit ventilator control, ask for new Unit Ventilator Control Application file.

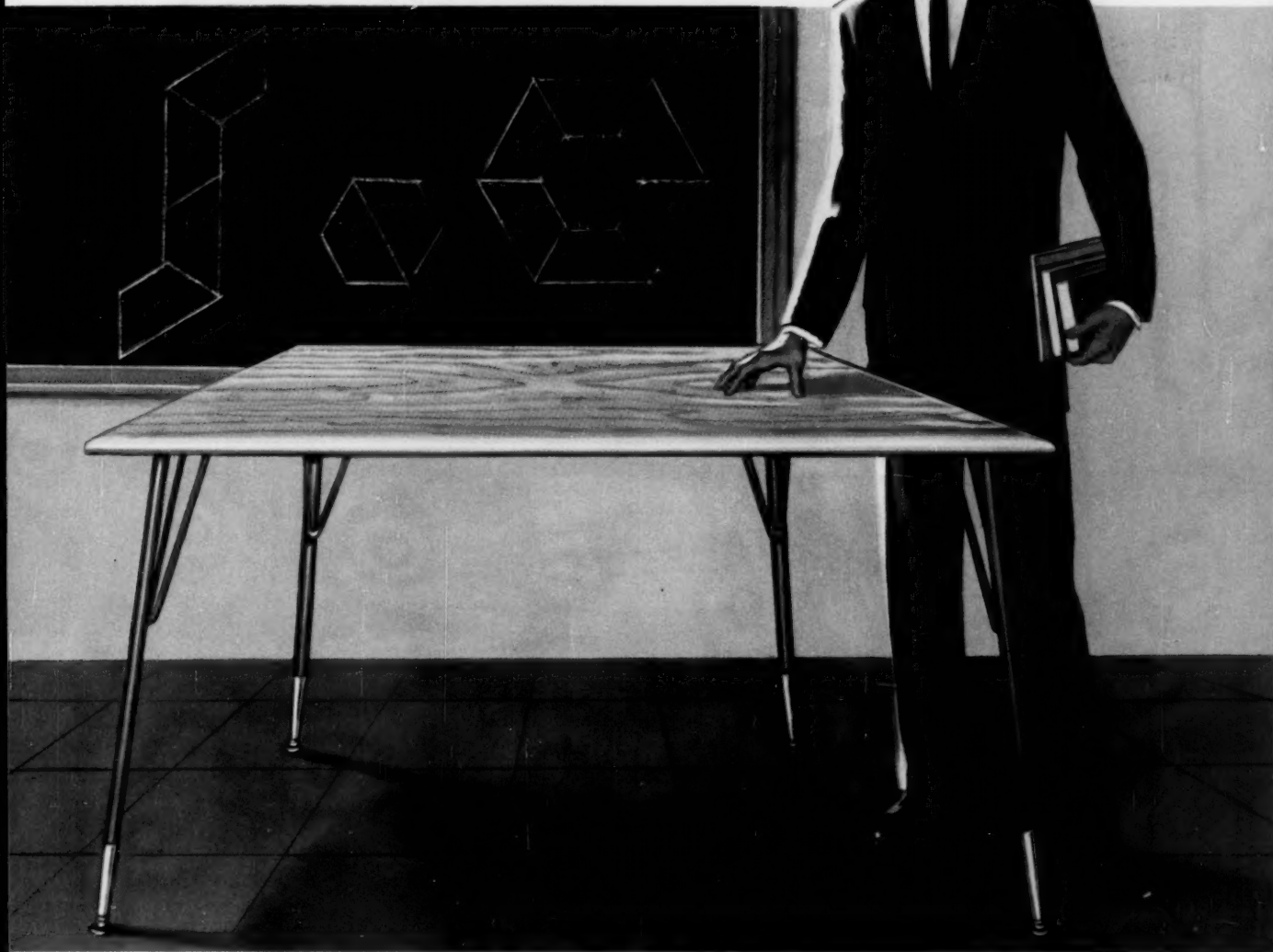
BARBER-COLMAN COMPANY

Dept. I-1353 Rock Street, Rockford, Illinois

One source . . . one responsibility for both air distribution and automatic controls

His place in tomorrow's society is our finest testimonial

*He's just discovered Euclid and the Samsonite **TRAPEZOID TABLE**
that can be arranged in any geometric grouping*



Samsonite...foremost authority on contemporary
seating design offers a new kind of classroom furniture
that will influence the thinking of the entire industry.

*Be sure to see new Samsonite furniture...first...
Then compare and decide. You owe it to him!*

Modern design...Versatility

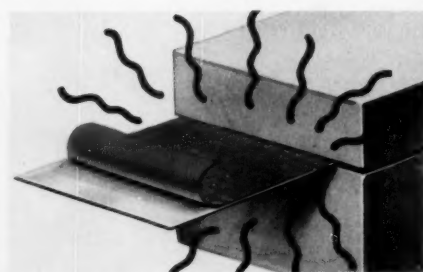
Exclusive

SAMSONITE PLASTISHIELD

After years of careful research, Samsonite has discovered that vinyl laminated to steel through a pressurized heat process—actually resists damage better. Though this remarkable new material has the look of linen, it is virtually indestructible. Guaranteed by GOOD HOUSEKEEPING to be stain-proof, slash-proof, burn-proof — in short — mischief-proof!



This is Samsonite's **STUDY DESK** that combines the best features of a desk and chair in one mobile unit. Desk is scaled to PlastiShield seat height. With book-box or book-rack.



This is Samsonite's **STUDENT DESK** that pairs off with the student chair. Can be used as desk or table. Available with open front book-boxes, or with lift lid and closed front book-box.

This is Samsonite's **PlastiShield STUDENT CHAIR** with exclusive compound-curve pivot-back support, extra-large contour seat. Carefully proportioned to assure less fatigue, more attention. Actually helps improve a student's posture.



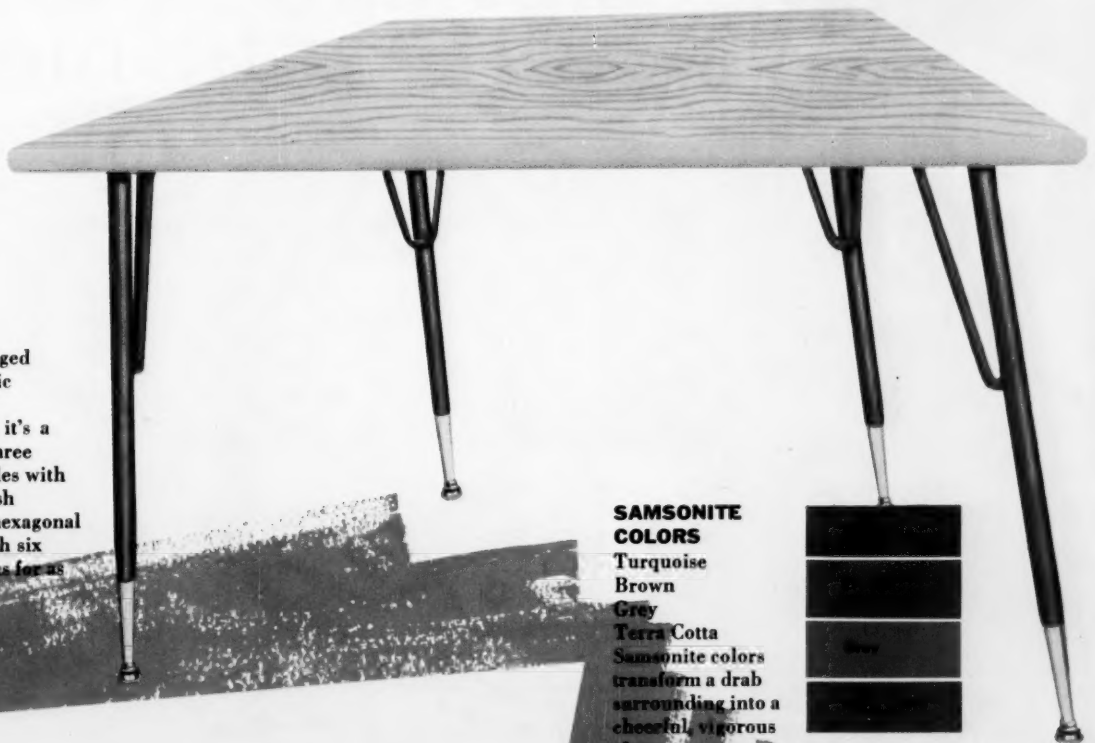
PIVOT BACK SUPPORT—with swivel on two-point suspension. Cushioned contact points insure silent pivoting action.



Strength... surface...that's **Samsonite**

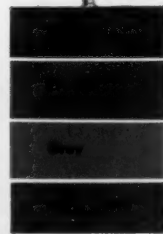
**This is
Samsonite's
TRAPEZOID
TABLE**

that can be arranged
in many geometric
combinations.
As a single unit, it's a
desk for two or three
students. Two tables with
the long sides flush
together form an hexagonal
"round" table with six
well defined places for as
many students.



**SAMSONITE
COLORS**

Turquoise
Brown
Grey
Terra Cotta
Samsonite colors
transform a drab
surrounding into a
cheerful, vigorous
classroom.



LEG SPATS—Tapered
metal "spats" camouflage
scuffs and mop-marks, glide
silently, effortlessly. Provide
clean contrast to frame color.



TUBULAR STEEL CONSTRUCTION—
Adds strength without weight.
Durable. Electrically welded.



**This is
Samsonite's Single Pedestal
TEACHER'S DESK**

equipped with spacious writing surface, roomy
storage drawers, ample filing facilities.
Durable construction and equipped with swivel
glides to facilitate easy movement within the room.
Also available in double pedestal model.



The Foster Junior High School of Seattle, Wash.
uses Samsonite furniture. In this classroom,
30 students can sit comfortably—with plenty of
aisle room—in Samsonite's mobile Tablet-Desk.

1958—biggest school
enrollment ever!

OVERCROWDED?

You need Samsonite's exclusive

PlastiShield FOLDING CHAIR

Samsonite reaches into the future to bring you a completely different folding chair. Watch your classrooms instantly take on new elegance with Samsonite upholstered-look PlastiShield folding chairs. Choose from washable tan or grey monk-cloth patterns.



...and Samsonite's original
**ALL-STEEL
FOLDING CHAIR**

Because actual tests proved conclusively that Samsonite can withstand over 1,000 pounds without bending, buckling, or sagging an inch, Samsonite is acknowledged the world's strongest all-steel folding chair.



Write Today for your free Samsonite School Furniture catalogue. We'll send you Samsonite PlastiShield discs, so you can make the PlastiShield torture test yourself.

NAME _____

POSITION _____

SCHOOL _____

SCHOOL DISTRICT _____

ADDRESS _____

CITY _____ ONE STATE _____

SHWAYDER BROS., INC., Classroom Furniture
Division, Detroit 29, Michigan.

Samsonite *Strongest
lasts longest*

STAINLESS COSTS LESS THAN ALUMINUM—



Do you know that the
square-foot cost of

stainless steel sheet for curtain wall panels is usually equal to or lower than aluminum when compared in thicknesses of equal indentation resistance? For example, Type 302 stainless steel, .022" thick is equal to .051" aluminum and costs only 62¢ per sq. ft., as compared to 67¢ per sq. ft. for 3003-H14 anodized aluminum.

For additional information on
all gauges, fill in and mail the coupon.

**Washington Steel
Corporation**
WASHINGTON, PENNSYLVANIA



WASHINGTON STEEL CORPORATION
9-EE Woodland Avenue, Washington, Pa.

Gentlemen:
Please send me full information on comparative costs of stainless steel vs. aluminum for curtain wall panels.

Name _____
Position _____
Company _____
Street _____
City _____ Zone _____ State _____

No matter which you use...



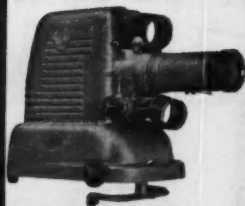
PROJECTOR IS...

*Guaranteed
for
a Lifetime*

Many projectors LOOK somewhat alike, in appearance and price — but Viewlex has something extra! Rigidly controlled standards of **QUALITY** carried through every step of manufacturing assure projectors that are trouble free and a delight in operation. **VIEWLEX QUALITY CONTROL** is a precious property — it is the real reason why Viewlex guarantees every Viewlex projector for a lifetime!

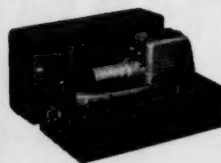
V-4S — V-44S

For single-frame filmstrip. The ideal budget-priced filmstrip projector. Clear, sharp projection; brilliant illumination; simple to operate. Cannot tear film. Model V-4S 150-watt convection cooled. Model V-44S 300-watt motor fan cooled. 2", 3", 5" and 7" focal-length lenses available.



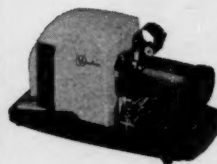
VIEWLEX VIEWTALK

Plays standard and long-playing records, up to 16" — two permanent needles on twist arm. 33 1/3, 45, or 78 r.p.m. Model WR — 4" x 6" detachable speaker for 150 or 300-watt Viewlex projectors. Model WHD — 6" x 9" detachable speaker for 500-watt projector.



V-500

For 35mm filmstrip single and double frame, vertical and horizontal pictures. Takes 2"x2" and bantam slides in any type mount intermixed. New refrigerator cooling. 500 Watt fan cooled. 5 inch F/3.5 Professional lens. Automatic take up reel and optical magnifying pointer. 3, 5, 7, 9, 11 inch lenses available.



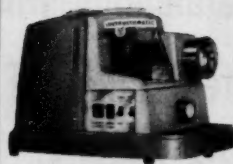
**HI FI
VIEWTALK**

A top quality sound-slide unit—3 speed record player for records up to 16". Brilliant, sharp projection provided by V-500 35MM combination slide-filmstrip projector. Projector or sound system may be used independently. Microphone jack provided.



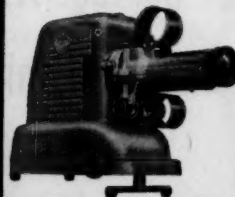
INSTRUCT-O-MATIC

Completely automatic projection of 2 x 2 and bantam slides. A touch of changer automatically brings new slide in position. Automatic timer—remote control—lets you sit with your audience. 500 watt fan cooled. Interchangeable lenses. Turns room light off when projector is turned on.



V-2C - V-22C - V-25C

For 35mm filmstrip single and double frame, vertical and horizontal pictures, 2x2 and Bantam slides, any type mount. Change from filmstrip to slides in seconds. V2C—150-watt, V-22C—300-watt motor fan cooled. V-25C—500-watt motor fan cooled. 3-5-7-9-11 inch lenses.



*World's Largest Exclusive
Manufacturers of Still Projectors*



**35-01 QUEENS BOULEVARD
LONG ISLAND CITY 1, N. Y.**

FOR MORE PROFITABLE PACKAGED MILK PROGRAMS



Specify

QuiKold

ELECTRIC COOLERS FOR BOTTLE AND CARTON MILK SALES

MODELS FOR EVERY SALES LOCATION—Schools, Cafeterias, Restaurants, Food Markets, Dairy Stores.

NEW, LARGER CAPACITY—All 1958 model QuiKold dairy coolers provide 25% greater bottle and carton capacity.

FULL VALUE ON EVERY MODEL—No other line gives you as much for the money as QuiKold dairy coolers. Only S & S Products, Inc., lets you order to meet current equipment needs—in any quantity, large or small—with no price penalty.

LONG, PROFITABLE SERVICE—QuiKold electric coolers operate for pennies a day. Heavy-duty construction stands up under all types of service. Fully warranted and Underwriters' Laboratories Approved.

**MODEL 1400-WD-2
(SHOWN)**

•
**OTHER MODELS
AVAILABLE**

•
**WRITE FOR
FREE CATALOG TODAY**

S & S

Products, Inc.

CHICAGO, ILL. • 1958, 1959

Motivate Greater Science Interest...

DAVIS-SMITH Science Charts

Thirty-two charts. Size: 50 by 38 inches

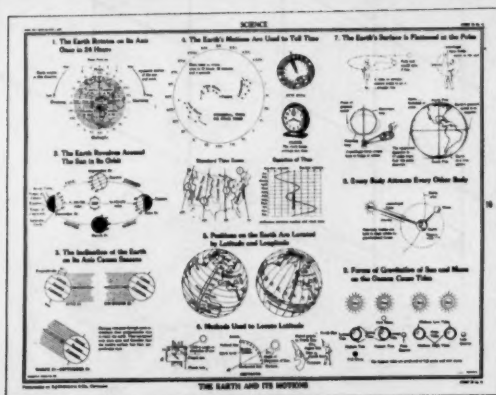


Chart No. SC 10

The Davis-Smith charts present the basic principles and applications of science. The content of the charts is based on a comprehensive study of recent textbooks on science and a thorough analysis of many courses of study. They constitute a pictorial core curriculum in this subject matter area.



Set of 32 charts, on tape-bound manila, in chart head, with tri-pod \$51.50

Send for free
Science Booklet:
NSS-9

A. J. NYSTROM & Co.
3333 Elston, CHICAGO, 18



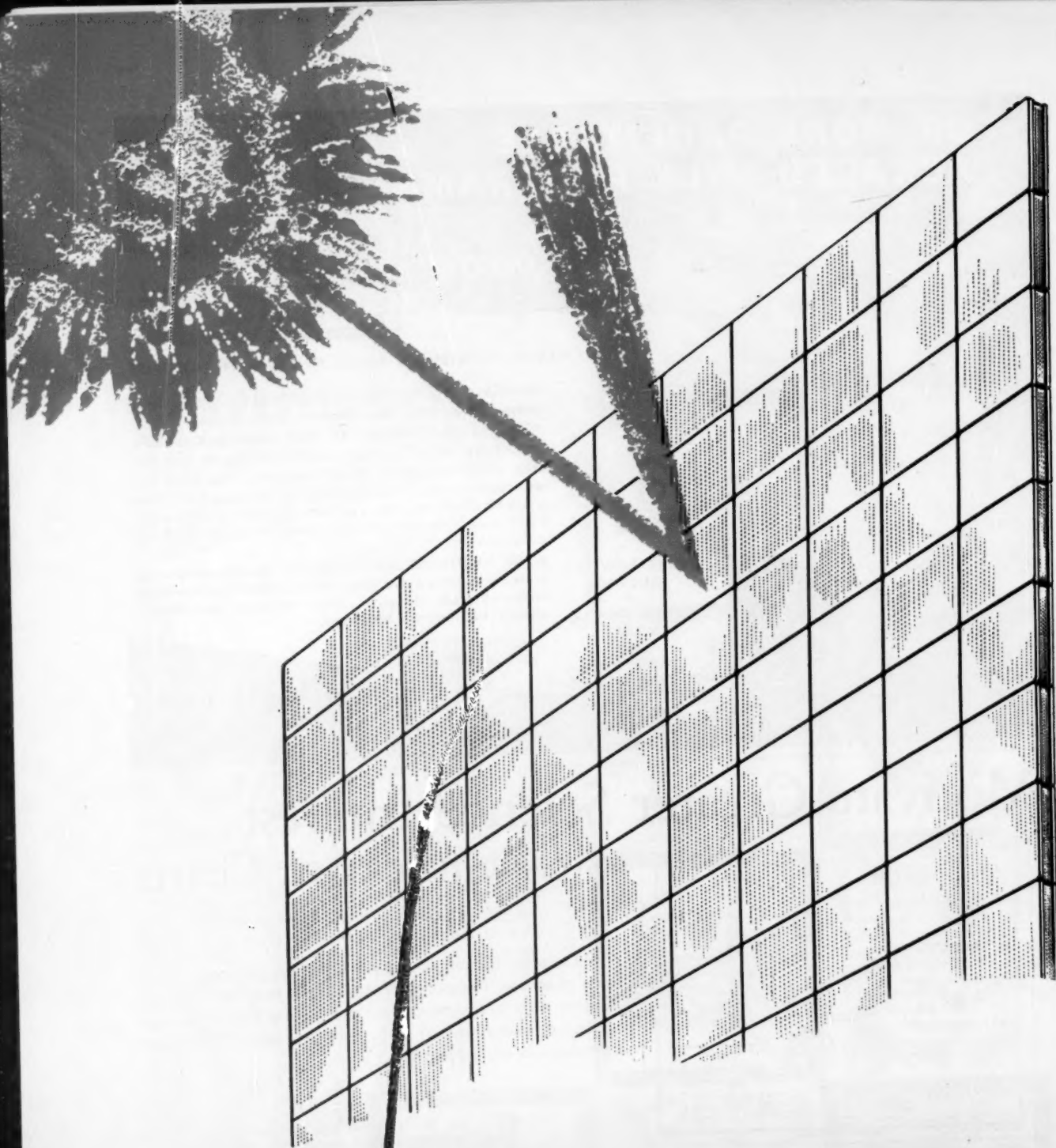
NYSTROM Satellite Globe

Both globe and satellite electrically driven.

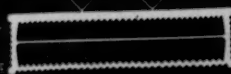
This rotating globe and revolving satellite will catch the interest, stimulate the imagination, and hold the attention of every pupil and teacher. Pupils, after observing this realistic demonstration, will readily grasp the principles of planet-satellite relationships.

No. GPL126 (shown at right) \$53.50





PRISMS REFLECT SUMMER SUN
yet readily transmit cool ground-
reflected light, weak Winter sun.



OWENS ILLINOIS TOFLITE ROOF PANELS, incorporating
the same solar heat control benefits, are available for
horizontal use to transmit cool daylight through the roof.

NEW . . . at last, a glass that reflects the hot sun

This is new Owens-Illinois 80-F Glass Block.

Its specially designed prisms reflect hot sunlight, transmit cool light rays. 80-F is the new way to keep classroom temperatures at comfortable levels . . . to assure maximum student attentiveness, minimum teacher fatigue.



Planning to build a new school? Remodel an old one? Before you start, be sure to investigate the unique benefits offered by Owens-Illinois 80-F Glass Block. For full information, write Kimble Glass Company, subsidiary of Owens-Illinois, Dept. NS-9, Toledo 1, Ohio.

GLASS BLOCK AND TOPLITE PANELS
TWO ① PRODUCTS

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

*...her own
personal
cups and plates*



NO DANGER OF CROSS-INFECTION from hastily washed dishes and glasses! Disposable, single-use Dixie Matched Food Service is another check in the path of those contagious epidemics.

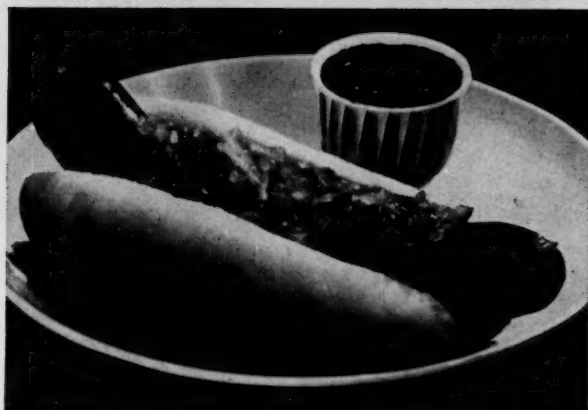
IT COSTS NO MORE! Dishwashing is practically eliminated. Clean-up is a "breeze". Valuable storage space is freed. Less help is needed. Total savings more than offset the small per-meal cost of safe, sanitary, single-use

DIXIE* MATCHED FOOD SERVICE

not all paper cups are **DIXIE CUPS**...just the best ones!

DIXIE CUP Division of American Can Company, EASTON, PA. • CHICAGO, ILL. • DARLINGTON, S. C. • FORT SMITH, ARK.
ANAHEIM, CALIF. • LEXINGTON, KY. • BRAMPTON, ONTARIO, CANADA

DIXIE is a registered trade mark of DIXIE CUP DIVISION OF AMERICAN CAN COMPANY



Heinz Ketchup

belongs on

most every dish!

Please your customers by serving the Ketchup they use at home . . . richer, thicker *Heinz* Ketchup. Its genuine, old-time tomato goodness makes so many dishes so much tastier.

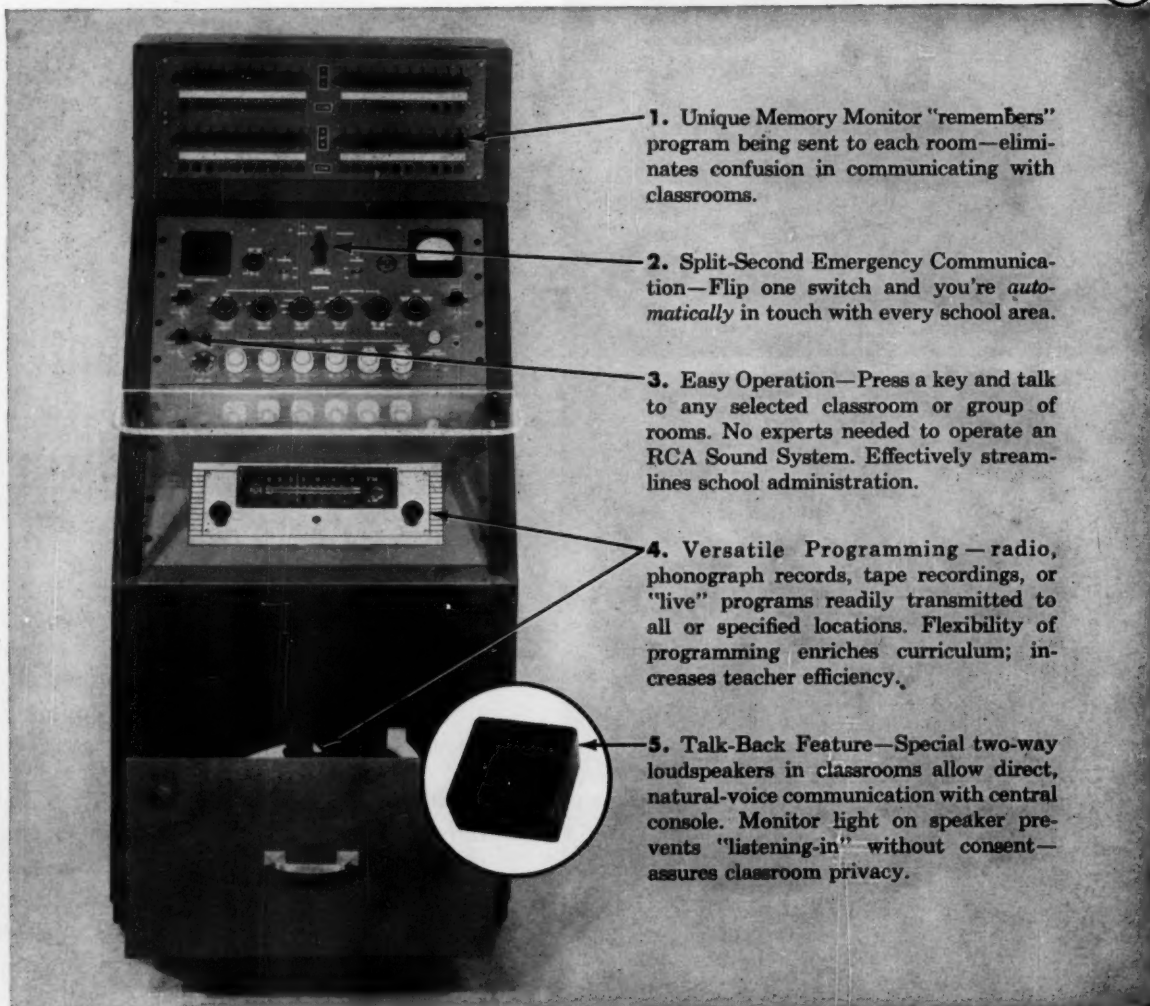
● Chances are, too, you've already found that any recipe calling for tomato flavoring tastes better when you use *Heinz* Ketchup. Best of all, you can count on *Heinz* Ketchup every time, *all* the time—because its superior flavor and quality are *always* the same.

● It adds so much, costs so little, to serve the best. Be sure next time your salesman calls to say "*Heinz*" when you order Ketchup and Chili Sauce.

Heinz



Our Business Is To Make Your Business Better



1. Unique Memory Monitor "remembers" program being sent to each room—eliminates confusion in communicating with classrooms.

2. Split-Second Emergency Communication—Flip one switch and you're automatically in touch with every school area.

3. Easy Operation—Press a key and talk to any selected classroom or group of rooms. No experts needed to operate an RCA Sound System. Effectively streamlines school administration.

4. Versatile Programming—radio, phonograph records, tape recordings, or "live" programs readily transmitted to all or specified locations. Flexibility of programming enriches curriculum; increases teacher efficiency.

5. Talk-Back Feature—Special two-way loudspeakers in classrooms allow direct, natural-voice communication with central console. Monitor light on speaker prevents "listening-in" without consent—assures classroom privacy.

VERSATILE RCA SOUND SYSTEMS ADAPT TO ANY SIZE SCHOOL, ANY ACTIVITY

Whatever your school size or requirement, you can depend on RCA Sound to step up efficiency in administration and to add new flexibility to teaching programs. And, prices are far lower than you'd expect for these RCA Sound System features that do more for you . . . reliably . . . simply . . . with versatility. There's an RCA System which will meet the exact needs of your school.

Ask your RCA Engineered Sound Distributor. He'll plan an RCA Sound System for you. Your RCA Distributor is in your Classified book under "Public Address and Sound Systems." Or, get the RCA School Sound story in a file-size brochure by writing directly to us . . . Educational Services, Dept. K-2, Radio Corporation of America, Camden 2, N. J.



RADIO CORPORATION of AMERICA

EDUCATIONAL SERVICES
CAMDEN, N. J.

LOOKING FORWARD

SEPTEMBER 1958

A New Faith in Education

EDUCATION is a passion here," wrote Herold C. Hunt from Russia during his recent 7000 mile tour of schools in the Soviet Union.

Would foreign educators visiting this country say the same about us? What would they discover as the motivating forces in our culture?

Lawrence Derthick, U.S. commissioner of education, verified the observations expressed by Dr. Hunt. Said Dr. Derthick:

"Our outstanding impression was of the total commitment of the Soviet Union to education. We saw it on every hand — the parents, the citizens, industry. The whole nation seems to be going to school."

Commissioner Derthick was chairman of the group of 10 educators who spent 30 days visiting schools behind the Iron Curtain, seeing educational institutions not only in Moscow and in Leningrad but also in out-of-the-way communities beyond the Ural Mountains.

"We also were impressed," said Dr. Derthick, "with the intense competition that the Soviet Union feels with regard to the United States. It manifests itself in every aspect of their life, and certainly in education. They have a slogan we saw everywhere. It is: 'Reach and Overreach America,' and they are working like mad, like a nation at war, to do that."

Another member of the visiting team, George Z. F. Bereday, associate professor of comparative education at Teachers College, Columbia, was asked the question: "How did the Russians get to be the way they are?"

He replied: "I think it's because their government succeeded in convincing them that, when they made the Revolution, they made something that was very much *their own*. They have a sense of proprietorship about the changes they have effected, and they are all *excited* about them. It is *all theirs* and theirs to fulfill."

THE CULT OF EASINESS

"And as I think about what we could do in our country," he said, "I see that what we need is to bring back our own Revolution — in our homes, in our schools, and in our lives. But as I look around, I am awfully afraid that the American people, living in the lap of abundance, tend to take *their* Revolution for granted."

The recently released Rockefeller Brothers Fund report on education refers to our apathy as "the cult of easiness." One paragraph reads: "The characteristic picture of the citizen-as-consumer has taken a firm grip on the national imagination; and the consumer is, almost by definition, a creature devoted to self-gratification. He must be constantly and ingeniously served

milder cigarettes, softer mattresses, and easier driving cars. If his dollars are to continue flowing, he must be endlessly catered to, soothed, anointed, protected, healed, cajoled and generally babied. Add to this the fact that we get on with our national life through the mediation of representatives, agents or delegates of various sorts, all of them committed to protecting and nourishing the interests of those by whose sufferance they hold their posts. It is their professional role to be selfish for their constituents, to defend them from incursions on their comfort and convenience."

Although some of us may disagree with Robert M. Hutchins on various subjects, we think he analyzed this situation quite accurately in a recent Sunday afternoon TV program shared by William G. Carr, N.E.A. executive secretary.

REFLECTS PURPOSE OF THE PEOPLE

In discussing the problem of getting intelligent and enthusiastic support for public schools, the former chancellor of the University of Chicago said:

"The purpose of education in a democratic country is a *reflection*, rather than a *cause*, of the purpose of the people of that country. If the people are primarily interested in getting rich, powerful and comfortable and having a good time, their educational system will be directed, however imperfectly, to these ends. If, on the other hand, the people feel the need of intelligence, knowledge, judgment, criticism and independence of mind, then their educational system will be directed, however imperfectly, to these ends."

"The confusion in American education today betrays the confusion in American purposes. The reason we do not take education seriously is that we do not take our *situation* seriously, and we have not considered either the possibilities or the limitations of education as a means of coping with that situation. Our problems are how to make democracy work, how to *survive* in the nuclear age; and what to do with ourselves if we do survive. It is time we made a serious effort to discover what education can and cannot do to help us."

SCHOOLS SHARE THE BLAME

Some of the blame for the present attitude of the public toward its schools is the fault of the *school itself* and of the teaching profession.

We know, or we should know, that the ordinary citizen cannot fully appreciate his *political* freedom—his right to vote and to hold office—unless he knows how this freedom was obtained. (Cont. on p. 42)

In similar manner, the ordinary citizen cannot fully appreciate public education unless he knows the sacrifices and struggles that produced it.

But *what* does he know about the history of education? And *where* did he learn it? In school?

He knows about Lexington, Valley Forge, and Gettysburg — about the battles for *political* freedom and equality — but what does he know about the battles for *intellectual equality*? For freedom of the *mind*? For the right of every individual to grow and develop to the full extent of his potentialities?

What does he know about the Massachusetts Laws of 1642 and 1647? The Northwest Ordinance of 1787? The abolition of rate bills? The Kalamazoo Case? The Oregon Case?

What percentage of our *teachers* tell their pupils about the significance of these milestones in the fight for free public education?

And yet it was the Massachusetts Laws that established the principle that every citizen should *share* in the cost of educating the youth of the community.

The Northwest Ordinance set the precedent of grants from the *federal* government for encouraging schools and colleges.

The abolition of rate bills finally made public education actually *free*, rather than *partially* supported by assessments on parents.

The Kalamazoo Case opened the doors of *secondary* education to *all* the children of *all* the people.

And the Oregon Case firmly established the right of the private school and the parochial school to *co-exist* with the public school system.

Your neighbor and mine can tell you about our *war* heroes — Washington, Jackson, Grant, Pershing, MacArthur and Eisenhower. But what does he know about the great men who fought the *battles of learning* for the *common people*? Froebel? Pestalozzi? Horace Mann? Henry Barnard? William James? And John Dewey?

These men have influenced our personal lives and the development of our culture. They are greatly responsible for the manner in which we have been taught — and the manner in which our teaching is done today.

TEACH APPRECIATION OF EDUCATION

It seems to us that one of the first responsibilities of the public school is to bring to the child an understanding and appreciation of the institution that serves him.

In other words, one of the *first responsibilities* of the public school is to teach the child the *how* and the *why* of free public education. John Dale Russell defines this responsibility in these words: "Youths need to understand and appreciate public education—its purposes and objectives, its background, organization and problems—because public education is a vital force in the society of which they are a part. The time to develop these understandings is not when boys and girls have reached maturity but when they are young, when they are a part of school itself."

Some attempts are now being made, but with little encouragement, to teach *about* the school *in* the school. A few textbooks are now appearing on the scene with this purpose incorporated in their content.

And why not? We teach appreciation of music, art and literature. But what do we teach about man's continuing battle for the right to know, the right to learn?

Do we impart knowledge and understanding about the never ending battle for free public education?

But books and unit plans are not enough. We need teachers who are prepared and inspired for this mission.

How well do *teachers* understand the philosophy of education in this country? How much do they appreciate that our school system is the underlying structure of our concept of democracy?

Do they believe that it is through learning — and through the application of knowledge — that mankind improves his environment; that the business of education is the business of helping each individual to improve the conditions under which he and his fellow men live?

Merely to *know* is not enough. It won't get results unless we also *believe* in education as a means of improving the world in which we live; as a means of our making our own lives richer and more worth while; as a means of protecting, sharing and bringing to others the personal freedoms and liberties that are now endangered.

What the Great Teacher said about faith applies to public education: If we have faith even the size of a mustard seed, it will remove mountains.

If we have faith in education, if we *profess* that faith and *live* it, we can achieve *miracles* with our schools.

Incompatible?

IS IT unethical for a school board member also to serve in the state legislature? Interpreters of the constitution for the state of Michigan seem to think so.

Several highly regarded Michigan legislators probably will resign from membership on local school boards because of a recent ruling of the attorney general there. He has interpreted the state constitution as implying that it is "incompatible" for a legislator to serve simultaneously as a school board member.

It all started when a candidate for nomination in the legislative primary challenged the dual office status of a rival candidate, Raymond C. Wurzel, a township school board member. Rep. Wurzel told the press: "The ruling, in effect, discontinued a practice that has been followed in Michigan for many, many years without ever being questioned. I thought I was just doing a service for the people, the same as when I was head of the county farm bureau and the county community chest."

The situation is so illogical that it is ridiculous. More and more, the financing of education is becoming a responsibility of the state government. Certainly, nothing could be more valuable experience for a state legislator than to serve on a school board.

The determining factor as to whether legislators should be permitted to pursue some other activity when the legislature is not in session should be based upon whether that individual is neglecting his duties as a legislator, or is unduly influenced by his other occupation. Serving his community as a member of a policy making board in civic and social organizations, such as the public schools, should be a recommendation, rather than a violation.

The Editor

Design for a National Curriculum

PAUL R. HANNA

These Questions Must Be Answered

In a world as troubled as ours, do we not have to agree on a curriculum design that will at least expose all children in our nation to a common set of values and to a common fund of knowledge?

Can our precious liberties and the right of the individual to be different be protected by a people whose education may not have prepared them to hold in common a belief in such ideals?

Can a curriculum conceived primarily by the state board and the local school district and administered typically by the individual teacher provide adequate foundations for the nation's strength and welfare?

Can we hope to survive as a free people unless our enculturation includes the most significant generalizations from the frontiers of knowledge?

These are questions pointedly asked by laymen and educators alike, questions for which suitable answers must be found.



DURING the last 25 years we have witnessed a splintering of the curriculum in American public schools as each school district has insisted on curricular independence. A further discontinuity in curriculum has been encouraged as certain educational leaders have stressed the "right" of each teacher to select such teaching-learning experiences as he personally sees fit with little regard for the team role assigned him in the school's curricular pattern.

Finally, the school curriculum has not thrust its roots deeply into the fertile subsoil of the humanities, social sciences, sciences and mathematics. Too often, curriculum planners have been satisfied with the superficial content that feeds the whims and interests of the moment.

The net result of this curricular dilemma is all too obvious: The American schools are not in agreement on which understandings, attitudes and competencies should be the minimum

but universal enculturation of our children and youth. There is no truly American curricular design of significant content and suitable learning experiences on which the nation can rely for creating the universal understanding of and loyalty to the values, laws and institutions essential to perpetuate and improve the way of life of a free people.

We are not for a moment advocating that the lesser-than-national communities should not be treated fully in the school curriculum. Obviously each of the concentric circle communities of men (family community, neighborhood community, local community of city or county or metropolitan complex, state community, region-of-states community, national community, the greater regions-of-nations communities, and the inclusive community of humankind) needs to be treated in the school curriculum.

However, we are saying that the state community and the lesser com-

munities within the state are currently well represented by state school boards and county and district school boards whose primary interest has been to provide the curricular design and teaching aids that will better assure common understanding and behavior of our young citizens in these smaller-than-national communities. So far, in the national community, no comparable public body exists to propose the design for a curriculum that will serve the ends of our national community.*

Some Unacceptable Solutions

One proposed solution coming from studies in comparative education would have the national government replace the local school boards and

*The only exceptions would be such commissions and committees as have from time to time been created for the purpose of examining school objectives and performance. The best known of such efforts is the Educational Policies Commission of the National Education Association and the A.A.S.A.

TIMETABLE FOR DESIGNING NATIONAL CURRICULUM

AUTUMN 1958

Five-day conference to find out:

1. Whether the proposal for a two-year effort on a national curriculum design is of high significance.
2. Whether a workable two-year plan of action can be prepared and endorsed.
3. Who are the most likely candidates for 1959-60.

YEAR 1959-60

Purpose: To draw up preliminary proposals for a national curriculum design.

1. A team composed of 15 specialists in as many major subject matter fields;
2. Ten fellows who are specialists in curriculum theory and practice, and five lay fellows.

Goal: A series of papers to be published by individual fellows, teams of fellows, or the group of 30 as a whole. These statements would serve as a basis for wide discussion of the problem by laymen and educators.

YEAR 1960-61

Purpose: To formulate a more mature proposal for a national curriculum design, using the papers of the first group of fellows and the subsequent criticisms as the starting point.

Personnel: A second team composed of 15 fellows who are competent in the substantive fields, 10 fellows who are leaders in curriculum designing, and five lay fellows, with some carryover from the first team.

Goal: A second and comprehensive curriculum design for intensive study by interested groups and individuals throughout the nation.

FUTURE:

Purpose: To establish a permanent, nonfederal National Curriculum Center or several such Centers whose goal would be the continuous examination of the exploding frontiers of human thought and achievement and to identify generalizations that must be incorporated into the national curriculum design.

the state educational commissions in determining curriculum design. In such a national system educational objectives would be achieved through a nationwide administration of a single curriculum design controlled by federal fiat. Such a proposal rightly arouses strong fear in freedom loving Americans—fear that a federally operated school system could be used to destroy our way of life if it fell into totalitarian hands.

Promising Solutions

But there are other ways to achieve a design for that part of our school curriculum which develops the common outlook essential for our national survival and progress. The proposal herein advocated draws on the successful experience of several other nonfederal endeavors in our nation: nonpolitical and voluntary cooperative efforts to meet a national need.

We have, for instance, a surprising unanimity of agreement throughout the nation on what constitutes the basic education for the profession of medicine. This agreement has been achieved by the continuing process of study, experimentation and program modification according to plan.

This movement has been led by the Council on Medical Education of the American Medical Association. The power of intelligent analysis and the soundness of proposals for curriculum have persuaded men and institutions to accept a relatively standard design for medical education that has resulted in superior training for these guardians of our national health.

To be sure, we are concerned in this proposal not with a profession's training but with the education of today's children, tomorrow's citizens, and this latter problem is vastly more complex and more crucial to the nation's welfare. The lesson to be drawn from the experience of medical education is simply this: *It is possible to gain national agreement through the efforts of nonpolitical and voluntary agencies.*

Establish a Laboratory

Let us return to the problem of a curriculum design to meet our national needs. It is my proposal that an existing center or laboratory be selected or a new one be created at which, during a two-year period, the problem be examined and that there be produced a series of fundamental papers on the national cur-

riculum design. These papers would then be used widely to stimulate a curriculum discussion by laymen and educators throughout the national community.

Undoubtedly there are many conceivable plans, any one of which might serve the functions herein considered. However, we have confidence that such a plan of operation as is outlined here could succeed.

Select a Team

The proposed Center could select for 1959-60 and possibly for 1960-61 30 fellows who would be competent, and deeply interested in focusing on the curriculum problem. Among the fellows thus committed, 15 might be specialists in cultural anthropology, sociology, political science, economics, human geography, demography, social psychology, jurisprudence, philosophy, history, public health, biological sciences, physical sciences, mathematics, language, literature, music, the arts, and so forth.

Each fellow, possessing broad competence in one of the foregoing foundations of school curriculum, would be selected because of his willingness to work as a team member on the identifying and the organizing of generalizations from his area that would probably become an integral part of the school curriculum.

The Center would at the same time select 10 fellows who are expert in school curriculum theory and practice. These school curriculum experts could be chosen from the universities, from state, county and city school systems, and from private schools. They would be competent in biopsychological theory of learning, in growth and development, in curriculum design, and in school administration.

The Center would select another five fellows who have had outstandingly successful experience in representing the laymen through local and state school boards, P.T.A.'s and similar government and voluntary groups.

These 10 fellows in school curriculum and five lay fellows would work closely with the 15 fellows in the foundations, but it would be the special contribution of the 10 curriculum fellows and five lay fellows to examine thoroughly the patterns by which the generalizations considered most significant by their 15 colleagues could be structured for school use. The team of 30, concentrating on the school curriculum problem, would together out-

line the task and procedures for the subgroups working on the two phases suggested.

The 30 fellows conceivably could make a solid beginning on this massive problem during the first year, 1959-60. Their work might culminate in a number of papers published by individual fellows, teams of fellows, or by the group as a whole.

One of the more specific outcomes of the 1959-60 effort should be mature proposals for the consideration of a second group similar in character to the 1959-60 group which would be assembled for the year 1960-61. Some overlap for 1959-60 and 1960-61 personnel would be desirable.

The second year of this enterprise should carry forward and enrich and refine the work of the first group. Out of this second year could come a document presenting a comprehensive curriculum design for the entire nation.

Such a fundamental statement on the school curriculum could then become the object of wide and intensive study by lay and professional groups throughout the nation.

Create Permanent Center

Eventually, we see the desirability of creating a permanent national center, or perhaps several such national centers in universities and/or in national organizations of educators and of lay citizens, continuously to examine the exploding frontiers of human thought and endeavor for the purpose of identifying those generalizations that should be incorporated into the school curriculum design as guides to teacher selections of pupil experiences.

The preliminary and foundational works of the 60 fellows at the Center during 1959-61 would be of inestimable value to any subsequent effort of the proposed permanent national curriculum center or centers.

It might be wise to test the soundness of this whole proposal by hold-

ing a five-day conference at the Center initially selected for the two-year study in late autumn of 1958. To such a conference might be invited a carefully selected panel of experts in the humanities, social sciences, sciences and mathematics, each one of whom indicates an interest in school curriculum. Likewise to such a conference should be invited leading curriculum theorists and practitioners and lay leaders from school boards and other citizens groups.

During such a late autumn conference three objectives would be uppermost in the mind of the Center administrative personnel:

1. Is the proposal for a two-year effort on a national curriculum design of high significance?

2. Can a workable two-year plan of action be prepared?

3. Who are the most likely candidates for fellowships?

There is widespread concern that the schools of this nation may not be providing sufficient common understanding of, loyalty to, and competence in our democratic way of life to assure its survival against the threat of internal and external forces of disintegration. We propose that a Center be selected or created to devote its potential (or a part of it) for a two-year period to a study of the national curriculum problem, hoping that the effort will result in a challenging, sound and prestige-laden statement. This statement would deal in fundamental ways with the national problem of selection and arrangement of content and teaching-learning experiences.

From this beginning it is hoped that a curriculum design would emerge that would give greatest assurance of the survival and progress of the values, laws and institutions of free peoples. ■

REPRINTS of this article will be available at nominal cost.



A distinguished career in education is that of Paul R. Hanna, Lee L. Jacks professor of child education, Stanford University. Dr. Hanna has worked with various educational agencies of UNESCO, was an adviser for the Kellogg Foundation for 14 years, and has been a member of several curriculum study groups. He was a member of the UNESCO educational mission to the Philippines and is presently the Coordinator of Philippine Department of Education-Stanford University Contract, U.S. International Cooperation Administration. He is the author of social studies texts, spelling texts, and professional educational books.

Criticism: How To Deal With It

Don't be so thin-skinned about it, say participants

In round table conducted by Administrator's Clinic.

Join hands with those who want more quality in education.

Narrated by CALVIN GRIEDER

ALMOST unanimously, the first concern of the participants in a round table discussion conducted in Denver by the Administrator's Clinic was the question of what to do about current criticisms of education.

As the conversation was rather free and uninhibited, individual contributions are not identified. Change of speaker is indicated by this symbol ▶.

With the beginning of another school year, what should be our attitude toward criticism of the schools?

▶ I notice, Cal, that we're too sensitive — our skins are too thin. Somebody makes a criticism and we get red-necked clear up to our ears and cease being logical. Too, I think it's pretty important to distinguish between destructive critics and the constructive people who are friendly to schools and who hope to see them better and want to help us make them better. Too often we lump them all together and treat them all the same.

▶ I feel strongly that all the great uproar of criticism is really evidence that more people in the United States are interested in the schools than ever before. And their criticism — maybe some of it isn't sincere — basically is a criticism of *quality*. All of us have been spending our lives trying to make schools better. We're interested in quality too, and so are all our associates. We never have claimed that we were perfect. But we're finding that perhaps 60 to 70 per cent of our

total effort is being pre-empted by extraordinarily pressing problems of *quantity*.

Instead of reacting negatively to these people who want better quality, we could say to them, "Look, we want better quality too. Let's join hands, let's go to it hand in hand instead of fighting each other about it."

▶ That's a fine attitude, but we have not convinced enough of the people that teachers and administrators are interested in good schools. So many citizens seem to think that we have no concern for quality in education, that we are just on a routine job, drawing our pay and are not really educators.

▶ No, Cal, I honestly believe that a heavy majority of American citizens are pretty well convinced that the schools are doing a rather competent job. The criticism we hear is a news play-up of what is typical journalism anyway — the sensational. Some of the things certainly can be done a great deal better. I'm not afraid to admit that we could do better if we had better ways to do them or better people with whom to do them. I can't help thinking that the answer lies in an aggressive public information approach at the local level. The answer basically isn't at the national level. We're going to have to meet criticism at home in a sensible way.

▶ Instead of meeting criticism we're just talking to each other — what dirty so-and-so's these folks are and how wrong they are. These folks that are criticizing education are not talking to us; they're talking to our clientele — parents and taxpayers. We don't answer the criticisms to the public. We talk back and forth to each other in a kind of locker room pep talk, but we never do get around enough to the public.

▶ When we talk about criticism we need to examine its origin. Much of what happens today is the result of articles in the national magazines and newspapers, syndicated columns, TV and radio programs. The motivation in many instances is utterly selfish.

They want certain things that have not been achieved by other means, so they say, "Let's work on the schools."

They also are downright afraid of trying to get what they want through local district school systems under local control. They think they're going to have better control; specifically they have a type of schooling in mind that they think is good for everybody. I've heard more of this last month in Washington than I've heard in a long, long time. For example, some proposals stem from high ranking officers in the armed forces, and most officers of the armed forces at the higher level have little sympathy for local districts. I've talked with many and they've all asked me, "Why do you put up with this harum-scarum local school district system that you have in the United States?"

▶ In trying to respond to some of the criticism in the national magazines of large circulation, the other side of the picture finds its way only into journals of very small circulation. For example, Harold Hand wrote a first-rate point by point refutation of *U.S. News and World Report's* so-called interview with Bestor (Nov. 30, 1956). But it appeared in the *Bulletin of the American Association of University Professors* (Summer, 1957).

▶ Instead of using discussion as a means of clarifying or really giving the full picture, the national media, particularly the magazines, use it as a basis for *advocating* something. Now the real reason for freedom of speech and discussion in this country is to have a means of seeking the truth. And the mass media, by and large, forget this and rather use it as a means of advocacy and propaganda.

What we've got to do in our respective communities, through civic leaders, clubs and the like, is get back more to the idea of dialectic — confronting of ideas with opposing ideas, reasoning about matters of opinion, the search for truth. The more we can get opposing ideas out on the platform instead of opposing personalities, the better. We have not been willing to

Administrator's Clinic

The Clinic this month and for the next three or four months will be based upon problems and ideas discussed at an all-day round table by six school administrators, the editor, and the conductor of this column. The discussion took place at Denver, under the auspices of The Nation's Schools. Readers are invited to send comments.



The eight participants in the all-day round table conducted by the Administrator's Clinic were, left to right: Calvin Grieder, clinic moderator and professor of school administration, University of Colorado; Supt. William Bishop, Englewood, Colo.; Supt. Wendell Godwin, Tope-

ka, Kan.; Supt. Natt B. Burbank, Boulder, Colo.; Supt. Carl B. Franzen, Fort Morgan, Colo.; Harold Moore, director, school of education, University of Denver; Supt. Kenneth E. Oberholtzer, Denver, and Arthur H. Rice, editor, *The Nation's Schools*, sponsor of round table.

get everything out on the table. The antidote to this is many, many local opportunities for free discussion, questioning, give-and-take.

The policy in our school system is to get as many discussions into as many places as we can on an issue. When the *Life* series came out, I got not one single telephone call or letter. People were interested but they were not alarmed. I spoke at one of our local service clubs at that time, and ran 20 minutes overtime, and they invited me to come again a few weeks later. This had never happened before. So there's more interest. But not alarm! Now in addition to many local meetings we've got a national job.

► What concerns me is that the big circulation publications seem to take extreme positions, and what they are printing is written by professional propagandists. While we're professionals in school administration and education, educators over the country are not professionals in dealing with these propagandists.

► Yes, the origin of much that we're concerned with is in national publications. It is not something that happens in the locality or in the state or even in the region, although it may create interest. The other point we ought to make here is this: "Take the shoe and see if it fits in any way." Many things are said about the schools, as though they were all of a pattern. Where do the critics get their data? Where do they get their ideas? In large part what they're talking about is philosophical, embellished with illustrations picked up here and there.

There are about as many individual differences, I suppose, among schools as there are among people.

► I can see a couple of positive points. First we've had a great deal of national publicity. It has alerted people to school needs and probably set the stage for the best school improvements we have ever seen.

Along with that is the typical American characteristic of helping the underdog. When everybody starts chewing on somebody, people start rallying to his defense.

From the negative standpoint, I am concerned because the technic being used in many cases is the one Hitler used so effectively — the big lie. If you tell a whopper often enough, pretty soon a number of people begin believing at least part of it. If enough begin believing it, then it's a really critical kind of danger.

► The trouble is that for almost every criticism, no matter how big it is, as you say, or how severe, a few cases can always be found to give it just enough validity so that people swallow it. There may be no local applicability at all, but people are stirred up.

► That's not necessarily the case. People frequently don't believe all this stuff. They look at the local situation and, if it doesn't prevail there, they don't believe it. Just remember this, that we have a culture and a program of education that are different from any other culture and any other educational system in the world. If we have been able to instill in the people some ability of critical analysis, then we shouldn't be worrying as much as

I think we are worrying. We're on the threshold of a new age in education.

► It strikes me, though, that we may be up against a really difficult problem because we need so much more money to run schools, and we are trying to get that money in an atmosphere of criticism. We face the possibility of not being able to get the money to do the quality job we need to do, which will play right back into the hands of the critics.

► The basic strategy ought to be to change the issue and quit arguing about how bad the schools are or how good they are, but to agree that they aren't as good as we want them to be, and from that point on carry on a debate on precise and definite issues on how to make them better and how much it's going to cost.

► Before we get away from this subject, I'd like to point out that in our dealing with the school board and the community generally, we do analyze our instructional work and our educational program every year. We present the needs of the schools, desirable changes, and what it's going to take to meet the needs and make the changes — all, of course, within the range of the budget that will be available to do the job. I have felt for a long time that our schools are doing a good job. I refuse to be pulled off that belief or drawn into a side alley by a criticism that somebody makes. We analyze our schools and we know where they are weak and what is needed for their improvement. ■

Next month: Superintendent and Teacher Relationship

Teachers Rate Merit Rating

MERLE W. TATE and CHARLES F. HAUGHEY

ALL the talk about improving the salary levels of professional employes logically leads to discussion of one of the important ways of raising salaries, at least the salaries of teachers of outstanding ability. Such deliberations involve merit rating in some form. And yet few plans have evoked so much opinionated and exhortatory literature and as little factual study as has merit rating.

Twelve school districts in suburbs of Philadelphia¹ united to study merit rating late in the school year 1956-57. They appointed a steering committee of five administrators, and at its suggestion a representative committee of one teacher and one administrator from each of the 12 districts was set up to encourage and coordinate individual studies in the districts.

During the summer and early fall months, it became evident that teacher concern about merit rating was mounting. The committee then decided to try to determine the sources of this concern and, as a guide to further study, the points on which teachers could agree or disagree about merit rating. We were engaged to act as consultants.

A questionnaire containing 28 statements about merit rating was constructed. It asked for information regarding sex, marital status, school division, years of experience,

previous experience with merit salary programs, and preference for one of the following definitions:

1. Merit rating is an equitable plan which provides a salary schedule on the basis of professional efficiency.

2. Merit rating is a systematic method of evaluating teacher performance to help determine promotions, transfers, dismissals and salaries as well as to provide an analysis of strong and weak points so that the teacher's performance may be improved.

3. Merit rating is a subjective, qualitative judgment of a teacher made administratively by one or more persons, with or without the participation or knowledge of the person rated, for purposes of determining salary only.

In introducing the questionnaire, the Educational Service Bureau explained to the teachers that the purpose was neither to promote or retard the development or operation of merit salary programs. It simply wanted to find out how the teachers feel about some of the important issues involved.

Teachers were told that there were no right or wrong, best or worst answers. They might expect to find themselves not entirely consistent, they were warned, as few persons agree with all the arguments for merit rating or with all of the arguments that have been made against it.

Don't sign your name, the teachers were advised, as the Bureau is interested in group opinion, not individual opinion. After the responses are tallied, each school would be sent a summary of the results, the teachers were promised.

In December 1957, teachers in nine of the 12 districts filled out the questionnaire. Eight of the nine sets of returns were complete, for a total of 849 teachers, 18 administrators.

Responses and information on each questionnaire were recorded on punch cards. Reliability or consistency was examined by correlating responses on cross-checking statements, such as 4 and 23; by correlating scores² for a random sample of 100 on equivalent halves, and by comparing total scores with responses to leading statements, such as Statement 19. In view of the many inconsistencies in opinions about merit rating, the questionnaire showed surprisingly good reliability, with coefficient from equivalent halves of 0.89.

Data were analyzed by district, sex, marital status, school division, and years' experience. Space limitations permit the presentation and discussion of only a few of the results of the various analyses made. The means of the percentage responses in the eight districts to the 28 statements are shown on the opposite page. The ranges indicated marked differences among districts; indeed, for the majority of the statements, they sug-

¹These districts are: Coatesville, Collingdale Borough, Downingtown Joint, Kennett Consolidated, Media Borough, Oxford Area, Pottstown, Ridley Township, Sharon Hill, Springfield Township, Paoli Area High School and Tredyffrin-Easttown Elementary, and West Chester Joint High School. In the eight districts actually taking part in the study, the size of the professional staff ranged from 42 to 212; median salaries from \$4500 to \$5099; the median ratio of professional staff per thousand weighted pupils was 52.2, and the market valuation per weighted pupil ranged from \$10,031 to \$32,830. Only one of the eight schools has a merit salary program.



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Teachers' Opinions on Merit Rating in Suburban Philadelphia

STATEMENTS	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
1. There is no justification for paying poor teachers the same as good teachers.	29	47	13	9	2
2. Equal pay for equal preparation and experience encourages mediocrity.	8	30	14	38	10
3. Merit salary programs stimulate professional growth of teachers.	11	33	25	21	10
4. Merit rating by committee of teachers and/or administrators tends to be popularity contest.	24	37	19	18	2
5. Even if reliable ratings were possible, merit salary plans would do more harm than good.	12	23	23	33	8
6. Many results of teaching won't be seen for years, so it is impossible to evaluate over short period.	17	36	9	33	4
7. Where merit salary schedules are established, ultimately there will be no salary schedules.	7	23	31	32	6
8. The better the teacher, the more likely he will favor merit salary schedules.	9	33	15	33	10
9. Hidden purpose of merit salary movement is to hold down total salaries paid to teachers.	4	10	21	51	14
10. Genuine cooperation between teacher and principal impossible if he rates for salary.	12	30	15	36	7
11. As teaching is a genuine profession, ways must be found to rate teachers and pay accordingly.	17	47	14	17	4
12. Merit rating for salary purposes is inconsistent with idea of genuine cooperation among teachers.	11	42	19	25	3
13. Merit rating salary programs are likely to lead to conformity in teaching.	4	19	23	47	7
14. Evaluation of teaching is no more objective than evaluation of pupil achievement.	6	35	22	31	6
15. With fixed amount for salaries, best teachers should get substantially better salaries.	8	34	25	28	5
16. Merit salary plans require more time and bother on part of personnel than results justify.	9	32	28	26	5
17. Distinguished service should be recognized, but not through salary increments.	8	23	16	40	13
18. Equal pay for equal preparation and experience is best way to maintain high teacher morale.	11	36	21	28	4
19. More can be said for merit salary programs than can be said against them.	3	20	32	32	13
20. If teachers will forget petty jealousies, merit salaries can work for benefit of all.	7	38	23	25	7
21. Merit salary schedules will attract more high-quality young people to teaching.	9	31	22	30	8
22. Merit salary schedules will hold more high-quality teachers in the profession.	12	39	19	23	6
23. "Apple polishers" and "paraders" will profit more than superior teachers from merit rating.	18	30	24	26	2
24. Satisfactory merit schedules can be worked out by continuous experiment in individual schools.	3	42	35	17	3
25. If basic schedules are reasonably satisfactory, provisions for merit rating are not objectionable.	13	58	15	13	2
26. Superior teachers are handicapped under schedule that does not recognize their competencies.	13	45	13	25	4
27. Since teachers, whatever their merit rating, must assume responsibilities in line with preparation and experience, they should be paid according to these.	8	49	22	20	1
28. Administrators shouldn't expect teachers to serve on committees whose purpose is to rate other teachers.	32	40	14	11	3

gested that the average percentage response needs to be interpreted very cautiously.³

If the eight districts are representative of medium-sized suburban districts, as they appear to be, it is reasonable to believe that in such districts opinion about merit rating is strongly influenced by intra-staff and intra-district conditions. If this is true, it may account for the varying degrees of success of essentially similar merit rating programs in different districts. Moreover, it supports the rather common belief that each district will have to work out its own merit rating problems.

Independent of interdistrict differences, the analyses brought out several significant differences among

categories. Administrators were more favorable to merit rating than were teachers, while junior and senior high school teachers were more favorable than elementary. Teachers with experience of less than 10 years were more favorable than those of 10 years or more. Expected differences between men and women and between single and married teachers did not materialize.

More impressive, however, than differences among categories of respondents were the differences in response to statements bearing on different aspects of merit rating itself.

Responses to such statements as 1 and 11 compared with responses to such statements as 4 and 28 strongly suggest that teachers are in favor of

merit rating as a theory but have important reservations about its operation. Seventy-six per cent, for example, agreed with Statement 1, "There is no justification for paying poor teachers the same as good teachers," but fewer than 15 per cent disagreed with Statement 28, "School administrators should not expect teachers to serve on committees whose purpose is to rate other teachers,"—a statement that touches on a rather commonly recommended method of making merit salary programs effective and fair.

In view of favorable majority reaction to the theoretical advantages of merit rating, some openmindedness about the various issues involved would be expected. That it exists in these 849 teachers—and more broadly, of course, if they are representative—is seen in particular in the responses to Statement 24 and in general in the relatively large percentage undecided about the majority of statements. There is further evidence of independence of thought in the fact that only 24 per cent of the teachers endorsed Definition 3. For these teachers, at least, it would seem that the time for exhortation, for selling the idea, has passed. What seems to be indicated is operational attacks on the various problems of merit rating, attacks that presumably will differ from district to district.

The questionnaire appears to give reliable results. It can be used to provide a starting place for groups that plan to begin study of merit rating problems and used again to see whether opinion changes as study proceeds. It can be used to compare opinion in districts with and without merit salary programs.

It need hardly be said that, in the absence of objective criteria, the opinions of teachers are important both in setting up merit salary programs and in appraising results. ■

³Summation scores were arrived at by assigning 5 to SA, 4 to A, 3 to U, 2 to D, and 1 to SD for each statement favorable to merit rating. The weights were reversed for each statement unfavorable to merit rating. Because there were 28 statements, the highest possible score was 140, the lowest 28. The median score for all districts combined was 84.5; the medians of the eight districts fell between 73.7 and 94.5.

⁴Complete analyses of opinion by various categories may be obtained from the Educational Service Bureau, School of Education, University of Pennsylvania, for 65 cents.

The Years Ahead for Education

"The Years Ahead" was the topic for W. M. Kiplinger, editor of the Kiplinger Letter, in a recent commencement address at Ohio State University. His predictions for schools follow:

The schools will be better. That's ensured by the tremendous burst of agitation and dissatisfaction about them in these days.

We'll have better physical facilities, more teachers, more teaching. We'll pay better, and we'll develop new higher status for teachers, which goes far beyond pay.

Television will become a standard tool to extend teaching, both in classrooms and in homes.

But — I can not foresee the time when we shall have fully licked the teacher problem.

As for colleges and universities, both good news and bad news.

One thing fairly certain is that all the colleges and universities put together cannot grow fast enough to take care of all the young people approaching college age. There must be more screening and selection. Entrance requirements must be higher. It will be harder for your kids to get into college than it was for you.

Tuition will go higher. It's got to go higher to pay the higher costs — in both public and private institutions.

To pay the costs, more students will do more borrowing and put mortgage loans on themselves, to be paid after graduation, in the earning years.

There will be a new system of financing for this, a new form of long-range credit. Note the Massachusetts plan for this. We shall have a similar plan in Ohio and other states.

Ohio State University (or any other state university) will not grow in numbers as fast in the future as in the past. It will have more branches throughout the state. Some will be two-year schools, like higher high schools. In the main university there will be a smaller proportion of undergraduates, a higher proportion of postgraduates.

Private or independent colleges will have to have public money, whether they like it or not. We can't get along without the small colleges, and in the long pull many of them just cannot finance themselves.

Public money for scholarships, both federal and state, will be coming along. But scholarships can become rackets. In some ways they already have, for they favor the rich institutions at the expense of the poor institutions. They even warp the course of good students, luring them to go to one place when they really ought to go some other place.

More postgraduate work for a number of selected students—Yes, of course. The times will require it. And not just in science and engineering, either. In other fields, too, in the social and humanities fields. (We don't all have to be scientists or engineers, but we've all got to be human.)

Never Forget: Teaching Comes First

**Some things are much more important than others.
What the administrator decides is most important
will determine what he will accomplish in the
school system and how the schools will function.**

CLYDE M. CAMPBELL

Professor of Education, Michigan State University
Executive Assistant, Michigan Assn. of School Administrators

SURELY the primary goal of the superintendent of schools is instructional leadership. Today when attention is directed toward such goals as rearing a race of people who can advance a program of world peace, control nuclear energy for constructive purposes, and bring to fruition an economy of abundance, how can it be otherwise?

Saying that the administrator should be an instructional leader is becoming a hackneyed expression. But here is the rub: When the administrator feels that he should be primarily accountable for all the activities of the school, the instruction, being more involved and less glamorous, tends to get neglected. The administrator simply cannot execute effectively all the tasks that some might say are his responsibilities. In instruction, it is being suggested here, should be a *mandatory* first choice, not a choice left to chance.

Work With Curriculum

The superintendent of schools should work actively with the instructional program because this is the essential purpose of the school. Buildings, bonds, buses, budgets, duties often assumed by superintendents, are only means to an end. Frequently, these activities are sufficiently routine

that they can be handled by someone who has less professional preparation; especially is this true if policies have been determined in advance.

Usurpation of the administrator's time by auxiliary activities is not unique to education alone; it holds true in all situations where there is a sizable staff and considerable bureaucratic operation. Such a subsidiary set of operations as housing, maintenance, routing and accounting accompanies production, and this applies to all fields of work.

The point is, who should devote his major interest to these subordinate functions? Perhaps the question needs to be stated more specifically: Should the chief executive permit ancillary activities so to capture his attention that he neglects the major purpose of his going concern?

In big-league baseball, it can be observed that the baseball manager dispatches paper work as quickly as possible so that he can give undivided attention to improving the team. Executives of profit making organizations focus their primary attention on meeting competition, not on the bookkeeping process. The military general dares not let himself get carried away with routine field activities to the neglect of checking strategy for the next campaign.

Let us look at the problem from still another point of view. If the school administrator is not adequately informed in the area of teaching and learning, he has difficulty making sound decisions on educational matters when the occasion demands it. In a broad sense, the administrator can arrive at his decisions in only three ways: (1) He may come to his convictions from well grounded knowledge in a field. (2) He may decide to act in a certain way more or less on hunches, and hope that everything turns out all right. (3) He may accept the judgment of others and endorse it as his own. It should be recognized that only in the first instance can the administrator really look forward to the development of his program with certainty and with confidence.

Don't Shun Leadership

One of the most persuasive arguments for the superintendent of schools becoming deeply involved in the instructional program stems from the law of disuse, or forgetting. Many superintendents of schools know less today about teaching and learning than they did the day they received their master's degree. Knowledge tends to fritter away if it is not recalled and used in an active program.

The superintendent who shunts instructional leadership off to someone else may soon come to know less about teaching and learning than certain of his officials of lower rank.

A potent argument for the superintendent's being interested in classroom activity is that the citizens expect this to be his field of specialization. Lay people are concerned first about how effectively children are learning and how good an educational program they have in their community, and second, about how efficiently the non-instructional activities of the school are managed.

It can become embarrassing if staff members consistently speak with authority about teaching and learning in the school program while the administrative staff remains silent. Especially can this be true if there is a spirited discussion about what is good or bad educational practice. The superintendent's silence when instruction is discussed can be eloquent in itself, if continued over a long period of time.

Frequently, when administrators find that they are less competent than their staff members, they follow one of two courses or both: They discourage staff members from speaking about instruction in audience situations, or they set the stage so that discussions about teaching and learning never come before a group of lay citizens, staff members, and school administrators.

Bureaucracy Develops

When it is apparent that the administrator is relatively uninformed about his primary field of work, a bureaucratic structure is likely to develop. Because of a feeling of uncertainty, staff members may be inclined to fortify and to expand their own positions in an enterprise. Each little phase of the business may tend to become an end in itself, rather than a means to an end. In other words, when the administrator has no deep-seated convictions as to priority in purposes, it tends to encourage staff members ardently to stake a claim that their own positions should rate high in priority.

What the administrator accepts as good or bad in education affects the attitudes, ideals and beliefs of all the other staff members. When the administrator is not essentially interested in the major purpose of the institution, the staff likewise may tend

to lose interest. Or, from a more positive point of view, the fact that the top executive understands the employee's work and his problems and is greatly concerned about the success of his efforts makes a significant difference in the employee's morale and in his ultimate production.

Difficult Communication

If the administrator is not interested in teaching and learning, it is even difficult for him to communicate with the staff. To have a high rapport with another person it is necessary to know something about his accomplishments and his aspirations. Staff members want to do the things that are expected of them. If there are no standards on the important work of the school, it is easy to see why incentive should be low. In short, there may be poor professional spirit because the administrator is not interested in the fundamental purposes of the school.

Perchance it should be mentioned that being an instructional leader doesn't mean that the administrator has to spend a major portion of his time supervising classes. In a large school he may work with an instructional council to help it set its goals. His instructional leadership may be with a few key persons rather than with the staff as a whole. Whether he tries to exercise leadership with a small or large number is not the issue. In truth, if the administrator tries to spread himself too thinly he may find that he is highly inefficient.

In a large system the superintendent may have no choice but to exercise his major instructional leadership with a small, select staff. However, the qualifying adjective "major" is significant. There should be occasions, perhaps in large groups, in which he talks face to face with faculty members about the educational program of the school.

In actual operation most administrators may give more instructional leadership than they profess to exercise. Assuredly, all superintendents must make decisions about teaching and learning practice because lay citizens and members of boards of education eventually ask for the chief executive's stand on important educational matters.

One other brief statement about the administrator's role should be presented. Lay citizens, when offering judgments about educational admin-

istration, frequently suggest that the school superintendent should follow the identical administrative practice found in government and in the commercial world.

It is a fallacy to think that all leaders must follow the same techniques and procedures, irrespective of the ends they may be trying to achieve. Each administrative setting has its own distinctive character. Size frequently determines what can be accomplished. If there are so many facets to a business that an administrator cannot be well informed in all fields, there may be no other choice than to rely heavily on the recommendations of staff members; this is what the mayor of a large city, the governor of a commonwealth, or the President of the United States must do. In these cases, because of size and the varied specialties in an enterprise, the administrator may have to act more as arbiter than a leader.

Now we come to this crucial deduction. Just because it is necessary to make decisions outside one's field of specialization, many persons go the next step and say that this is desirable and exemplary practice.

It is a far cry to state that the superintendent of schools should function in the fashion of the governor of a commonwealth when the governor may have no choice but to operate in this manner. Even a mayor, a governor, or the President would be better fitted for his position if he possessed a well rounded fund of knowledge about the responsibilities he is expected to discharge.

Duties Not Equal

School administrators should not assign equal weight to all the responsibilities that appear to be vested in their leadership position. Some things must be more important than others. What the administrator decides is most important will determine in large part what he will accomplish and how the school will function.

Being an instructional leader is not a practice that would come into conflict with present-day community values; in fact, the opposite is true. Faculty and citizens would like for the superintendent to be the instructional leader. Members of boards of education, parents and lay citizens surely would endorse the thought that the superintendent should be an educational leader above all other activities for which he is accountable. ■

For the Board, a Sense of Decorum

JAMES M. SPINNING

Former Superintendent, Rochester, N.Y.

THIS is no easy time for school boards—and never was.

The searchlights beat upon school boards as they wrestle with great basic problems of educational direction and emphasis as well as with the immediately driving needs for teacher personnel and building construction, and all this in the midst of swirling economic cycles and spirals.

Now I take my remaining life in my hands to plunge into some delicate, and some quite indelicate, aspects of how the school board gets its job done. With large qualifications later to be made, I venture to assert that a board gets its work done:

1. By the kind of people who serve on it.

2. By the ability of these people to understand their collective goal and to work harmoniously toward it.

3. By the board's ability to get itself a good executive officer, or superintendent, and then to work with him, not against him.

4. By its ability to find the line between policy forming and administration, and to respect it.

5. By its ability to carry community thinking with it—and to raise the money.

With appropriate interest and concern, each community can have such a board.

Have High Values

I believe that board members should have a high sense of values, values in which there is large place for the virtues that should go with such words as service, devotion, dedication and loyalty.

Let the board member be a community-minded person, equipped with good antennae to receive not only the surface rumblings but the

underlying indications of goodness in all men and of the ways to reach them. Let board members be known for their sincerity of purpose, their open-mindedness, and their fair dealing. Let them have no personal axes to grind or private grievances to whet; no conflict of interest, nothing to serve except the general welfare, not even their own vainglory. Let their personal probity and honest intention be so clear that their corporate acts can never be impugned. Then out of their prestige they can speak and their words will count.

But you can have a fine collection of individuals and still not have a board. The group needs to be welded together in agreement, not on every point, but in a spirit of mutual respect and accommodation, knowing how to work in essential harmony. There has to be an atmosphere in which realization of the magnitude and the importance of the task makes it difficult for petty behavior to usurp the big time.

However great the sense of togetherness, it must never descend to the level of the casual and cozy. A sense of decorum belongs to a board of education. Its president should be skilled to keep discussions orderly and on a high level, to distinguish between the important and the unimportant. For, being a deliberative body, a board should be strong for judicial-mindedness, wary of hastily formed judgments and off-the-cuff decisions. Such an attitude can help keep members from alternate popping-off and face-saving.

Should all board decisions be unanimous? An ancient legend recounts that in the early days of the century this was the rule with our Rochester Board of Education. The philosophy seems to have gone like this: If we five can't wrestle the problem through

to a single sound conclusion, how can we expect the community to do so, the community which elected us to do just that and whose confidence we aim to deserve? Certainly in my day not all decisions of the Rochester board were unanimous.

Yet no matter how split the vote, when a policy has once been adopted by a board or when an action has been taken, it must be just as thoroughly supported by every member of the board as if the decision had been unanimous—until such time as the board by majority count votes to reconsider it. Anarchy lies in any other course.

Ignore Many Details

There is often a thin, wavy line in these questions of where policy ends and administration begins. No efficient board will bother itself with the hundreds of details which, if they could be called policy matters at all, are best considered part of administrative policy: the scheduling of teachers to particular schools, the kind of soda straws to be used in the lunchroom, the minutiae of the athletic calendar, or the floral arrangements for commencement. The board will save its time for larger matters, such as regular meetings with staff and department heads in which information is furnished on the educational program. It will save its strength for the big problems of school sites and building types, for surveys of playground needs, property purchase, bonding rates, tax rates, public information, revising of rules.

The board will even visit schools in order to learn, not to direct. It will always be concerned with large aspects. Any board member, or any superintendent, who knows where the mop closet is in every school ought to be ashamed. But he should be

From a paper presented at the School Boards Institute participated in by board members of nine New York counties in the Rochester area.

ashamed if he doesn't know whether the schools have proper safety stairways and exit doors.

Shouldn't board members feel free at any time to discuss board policy and school operation with individual teachers, principals, directors or assistants, as they see fit? I should say Yes, if the superintendent knows that they are doing so and if all board members and the people with whom they talk thoroughly understand that board members have no official powers except as they are in board meeting assembled, that board policy and decisions are conveyed and implemented only by the administration. Of course, social and friendly and interest-taking contacts and sweating through commencement exercises are something else entirely—and greatly to be desired.

Well, now, take it the other way round. Hasn't a teacher or any other employe of the board a right to go directly to a board member with complaints about working conditions or gripes against the superintendent and other staff members? I should say not to a board member but to the board itself, and that not directly or without the superintendent's knowledge.

Handling Teacher Complaints

So what does the board member do when a teacher seeks to register such complaints with him and asks for action? He asks pointedly: "Have you taken this up with your principal or with the superintendent? No? Then won't you do so, please. I am sure that it will be looked into promptly and come to the board if the situation is as serious as it now appears to you. . . . You don't want to do it that way? Then may I tell the superintendent what is on your mind so that he may talk with you about it? You see, there is a recognized way for these things to be handled."

Such a course will not only save the board member all sorts of time but will serve to bring into perspective minor tribulations, some of which are brought up in the first place only to make conversation or in unconscious search for the therapy we all get from voicing our troubles.

Serious misunderstandings or what appear to be injustices should, of course, be canvassed with the superintendent with or without the consent, though with the knowledge, of the complainant. One of the biggest mistakes is to withhold from the re-

sponsible officer information about disaffection which it is vital for him to have. I have never minded being badgered about little matters so much as I have been disturbed by the cases where staff or board, seeking out of mistaken kindness to protect me from worry, or save my time, have failed to apprise me of incidents or tensions, which later blew up in my face.

But the person who, above all, should define the scope of the board's activity, fill in the chinks that the best set of rules is bound to leave open, is the board president. He has a particular duty to coach new members about the distinction between policy and administration. Too frequently this embarrassing business of staking out the territory is left to the superintendent. This makes for just the sort of stress that should be avoided.

It is the job of the president to watch carefully this thin line between policy and policy executing, just as it is his job to keep the board on the question under discussion, and, if they have not been embodied in formal resolutions, to summarize for everybody the conclusions.

Nobody has suggested preservice training for congressmen, but in a recent *NATION'S SCHOOLS* article, Calvin Grieder, professor of school administration at the University of Colorado, broached the theory that perhaps the states and localities should set up school board membership as so specialized a job that only those specifically trained and certified in the theory and practice of education should be eligible to serve, this on the premise that our school systems are now so complicated and so beset with technical problems as to be quite outside the range of ordinary competence. Dr. Grieder just raised the issue. He does not profess to know the answer.

I don't know it either. But that won't prevent me from giving it. I think such a prerequisite, even if it were practicable—which I doubt—would tend (1) to take schools further away from the community, (2) to deny democratic opportunity of service to many persons with the intelligence and devotion to provide the general oversight and direction that only the good lay person can provide, and (3) would tend to foul up to a fare-thee-well the proper distinction between policy making and administration.

Citizens committees? To serve a special purpose, Yes—ad hoc committees, each to study a specific problem, and in discharge of its purely advisory function make recommendations to the board, get thanked, and quit.

A citizens committee to rouse widespread interest in general school needs? Maybe—if it doesn't lose sight of its original purpose and become a watch and ward society, self-perpetuating and arrogant.

A citizens committee to take over a board duty, make a decision that belongs to the board? No! Appointed by the board to get the board itself off the hook? No, no, no! A board must stand up and be counted. It has no right to shirk responsibility, in unpleasant situations to shrug its shoulders and pass a hot buck to some group behind which it can hide. Resignation would be better.

How to Use Committees

There are many ways to engage the active and desirable interest of citizens. They can serve along with staff members on equipment and curriculum committees, on public relations committees, and Know-Your-School committees, working within, not outside, the school framework. They can assist in individual enterprises of a hundred sorts. They can participate in lecture series, school study groups, school evaluation committees, and the sort of ad hoc, one-shot, special committees appointed by the board, finish their job, and wait for reappointment. This is the kind of committee I was writing about a minute ago.

I mention it again as contrast to the general stand-by, all-purpose-but-nobody-knows-just-what committee that tries to cover the waterfront and the newspapers. That kind can be a severe pain in the cervical vertebrae.

This is not to say that some spontaneously generated committees have not done a lot of good. Situations vary. Much depends on the community. Much depends on the leadership and whether it stays that way. I suggest only that, if you must catch a bear by the tail, you don't drag him up the tree with you.

Now I've told you all I know—and a lot more. I'm almost as exhausted as you are. Let me just sign off by saying that I am sure of nothing except that school business is the grandest business in the world, that I still love every aspect of it, including board members. ■

They All Want In

to college, and Mr. Supt. is the very man
to perform that neat trick, so think the parents

FREDERICK JAMES (Chalk Dust) MOFFITT

UNTIL recent scientific catastrophes clobbered him, the aches and pains of a school administrator were comparatively trivial. As long as he could guarantee the care and improvement of the mental, social, moral, physical, psychological and psychiatric life of the young people in his charge, the community was inclined to be reasonably tolerant.

Of course, the public demanded a number of fringe benefits, such as an ability to conduct charity drives, to stage and determine protocol at all testimonial dinners and make up the financial deficiencies thereof, to substitute for Booster Club speakers who failed to show, to supply missing vocabularies for crosswords and scrabbles, to translate obscure Latin mottoes, to provide bands and glee clubs for community uprisings, to produce championship basketball teams, and to remain on 24 hour call for emergencies following the senior ball.

Tasks Accepted Cheerfully

The foregoing trivial tasks were usually accepted by school superintendents as a part of the nonscholarly and extracurricular duties that are part of any good public relations program. Few superintendents protested them or even suggested time-and-a-half for overtime.

Now, as the situation hottens up again, the school administrator is expected to sovietize his school by a process of selective elimination which will inspire his scientists and please his public. Simultaneously, he is urged to teach more of everything more often to more of everybody. After doing so, he finds further obligations.

The far-reaching American ambition no longer regards high school as the terminal point in education but insists that it increase its vocational

offerings and accelerate its college preparatory function. In an age of science and satellites, every child is entitled to continue on through college and become a sputnik if he desires.

Unfortunately, this objective creates an interesting crisis not only in curriculum planning but in added responsibilities for the school administrator. Many colleges are physically unable, unaware of, or unwilling to share the burden of all the children of all the people. Because of that inability, the paradox of "in" becomes increasingly acute.

It is a paradox in which parents want "in," colleges want "out," and the school superintendent wants a little rest and quiet. The future of a school administrator well may rest not only on how efficiently he manages his own bailiwick but also on how persuasively he can convince more scholarly and independent jurisdictions to accept his word for it. Stated percentagewise, the question is: How can a superintendent satisfy 50 per cent of the parents and 75 per cent of the college admission officials and at the same time obtain college entrance for 90 per cent of a senior class which has considerably less than 100 per cent college aptitude?

Administrators may argue that the responsibility for getting youth into college belongs to the child, the parent, the guidance department, and interested grandmothers. Theoretically this is true, but actually it doesn't really work that way. When the report cards are down and the last optimistic eulogy has been rejected by higher institutions, there is a court of last resort. The prosecuting attorney, the defendant, and the bail bondman in that court is the school superintendent.

Some school administrators, having been on leave of absence in Ethiopia,

may be inclined to minimize present-day difficulties of "in." They will recall with deep nostalgia the times when colleges sent forth recruiting officers and college glee clubs to entice the young and offered a bonus for every likely candidate, including pre-paid freight for a football prospect. With the exception of the footballer those dear days have gone forever. Today is the era of triumph for registrars and deans.

In the pursuit of "in," five important involvements determine success or failure. These are: (1) the school whence the youth is derived; (2) the youth, who presumably is more or less neutral; (3) the parent, who demands "in" for his child; (4) the modern examination system formulated to encourage "out," and (5) the final rat race, reappraisals and recriminations.

Schools Under Scrutiny

Today the gap between high school and college is closing. The preparatory school, its history, tradition, past and future record, and the administrator thereof are commanding more scrutiny from the college gatekeepers. The wise superintendent will make every effort to nurture the growth of this pleasant bloom and, without appeasement, will be harrowing his fields. Such a harrowing experience can be increased by working closely with all the accrediting associations, honor societies, and college visitation days, and by emphasizing scholarly achievement. Money and time spent on surveys and itinerant accreditors are well spent even though the findings of such groups oftentimes arouse the wrath of school boards.

The administrator should cultivate more colleges more frequently. He should go out of his way to meet presidents and, more important, col-



lege registrars. Early in the year he will discover that the latter group is made up of fine, agreeable, extroverted, happy-go-lucky fellows. Of course, there will be a day of reckoning, but why anticipate trouble? Let him, therefore, ogle the college faculty, employ the graduates from their schools of education, and, if financially possible, donate small sums to their student activities. Let him enroll as a doctoral candidate in his favorite institution provided such enrollment is not too revealing.

Meanwhile, the wise superintendent will not neglect his homework. College entrance demands are fearfully diverse and individual, and in his curriculum tinkering he should study their idiosyncrasies. Inasmuch as each inmate of today's graduating class makes application to an average of 930 colleges, this may be a little difficult but it will yield results. Some school administrators go even further. They prepare a special brochure for college consumption which sets forth their ideals and aspirations, including a picture of the superintendent in his most belligerent attitude. Such a publication may be more impressive than the school yearbook, although no research exists on this point.

In all these efforts, the status of the high school plays an increasingly important part. The school that encourages scholarship more than life adjustment gets the nod. This is no disparagement of life adjustment but simply an attempt to face the facts of college entrance.



In preparing the youth for college entrance, it is well to begin before his birth. By the time he is born it is too late, for the pressures toward a specific college have been built up and he has no free choice. If he is not already a "legacy" (and even legacies no longer have the legal and binding character of bygone days), misguided friends will send natal gifts of class sweaters and ancient pennants in order to condition him. The proud fa-

ther optimistically enrolls him in the Class of 1985, and the stage is set for future disaster. Before the youth enters kindergarten, if the father suspects that his offspring has inherited from the maternal side, he confers with the school superintendent and, by some mysterious alchemy, the superintendent becomes *in loco parentis* with full instruction on how he is to proceed.

It is not until the child enters kindergarten with an undetermined or possibly nonexistent I.Q. and obvious antisocial tendencies that the school superintendent realizes a major battle lies ahead. By the end of the third grade, the administrator is beginning gently to pressurize the teacher, conceal report cards, and mangle the anecdotal record. At this period, his relationship with the parents is non-combatant, and he is still speaking with the grandparents.

Suppress Poor Records

This is a time for thought, but the brave superintendent will not panic. Avenues of action are still open and it is useless to discharge the guidance department because guidance seldom begins until it is too late. On the other hand, records of juvenile delinquency should be suppressed whenever possible, and the child should be molded into socially acceptable behavior. If this can be done from the fifth year until the beginning of high school, there will ensue a period of comparative calm, and there is always a distinct possibility that before the final crisis the superintendent will have become a college president in his own right and be forced to see the other side of the coin.

But the years roll on all too quickly. Parental pressure is centered on lesser matters until, lo, the youth stumbles into high school, and the superintendent realizes that the battle will soon be joined.

It is now time to tell the facts of life to the youth—that times have changed since his parents were recruited, that the college not the candidate now calls the shot, and that he had better get on the ball. Other tough problems are to be faced, the extracurricular activities, for instance.

The youth must be convinced that if his scholastic marks suffer he will have to give up basketball, not trigonometry; that his studies must come first; that nothing should be taken for granted no matter how obvious it may

seem; that "the college of his choice" will have to be at least three or a dozen colleges of his choice; that there is a mysterious hurdle called the College Entrance Examinations Board; and that, if he really means business, the most important dates in his final school year are not those with the opposite sex. With this advice, and a great deal more, must the youth be prepared.

Conditioning the Parents

In advising parents on the hazards of college entrance that confront their offspring, I have evolved three protective rules: (1) Be frank. (2) Be modest. (3) Beware.

Rule 1, "Be frank," is based on the general misunderstanding of the parent as to the actual situation today. True, he has been frightened by stories he has read in newspapers and dire warnings from colleges. He has seen how classrooms are overflowing and is aware of the continual appeals by the schools for more of everything except children. He knows that there is a sharply rising curve of demand for college admission, but does he realize that on campus after campus as many as 10 applications from well qualified candidates are received for every one accepted? Parent and the applicant should realize that their chances are one in 10. Frankness about finances is also important or, in his role of "loco parentis," the adviser may find himself the co-signer of a promissory note. A few years ago, when many colleges had extra scholarships to subsidize preferred risks, it was not difficult for a student to earn his way through college.

"Last year," says Lawrence Derthick, U.S. commissioner of education, "the expenses of full-time undergraduates attending public colleges averaged about \$1500. A student in a private college paid about \$2000. In 1939-40, the average expenditure in a public college was about \$747. In the private college, the average totaled about \$1023." In view of present costs of tuition, textbooks, railroad fare, fraternities, hot rods, and name bands, the commissioner's findings may well represent the understatement of the year.

Other franknesses are needed, too. In his excellent brochure, "How to Be Accepted by the College of Your Choice," Benjamin Fine, former education editor of the *New York Times*, says with emphasis:

"I urge—I plead with parents not to inflict their own wishes on their children. I beg them to guard against unconsciously influencing the child's choice."

Rule 1 would not be complete without a final warning. Parents should be told that fulsome letters of recommendation, alumni agitation, or much bulldozing are no longer as efficacious as they used to be. It is almost impossible today to pull young people into college even though some push is still needed. It may be that a modest endowment for a professorship in science might help, but this is a bit impractical for the average school superintendent.

Rule 2, "Be modest," often neglected in the heat of battle, is even more important for the future peace of mind of an adviser of parents. It is altogether proper for a superintendent to be proud of the reputation and record of his school. Because of a great deal of practice, the average superintendent has every right to be convinced of his ability as a persuader, mediator and general Mr. Fix-it, nor is his proficiency as an epistolary expert open to question. But college entrance officers are notoriously stiff-necked and, as the pressure mounts, they become cynical and immune to the most heart-rending pleas. When, in response to the parents' perplexity, the superintendent says expansively, "Leave it to me," he is a long way out on a shaky limb.

In the career of every school administrator the third rule, "Beware," is always appropriate. In today's college jam it needs repeating. The wise superintendent will make no promises and will keep open his lines of retreat. He is no longer in the driver's seat.

Manipulating the Examinations

To gain admission to most colleges the youth now approaches the most awesome deterrent in his entire obstacle race. This is the College Entrance Examinations Board, usually referred to as Ceeb, Cab, Sat or in more profane terms. Three out of every 10 accredited colleges use this method of disposal, and within the next decade probably every high school student will be given his Ceebs along with his daily vitamin pills.

With the high purpose of these examinations, no pedagogue can quibble, even though the older and wiser administrator may recognize this own lack of ability or courage to emerge



successfully from the ordeal. He must realize that in an age of science, mechanics and electronic computers, he has been neatly hoisted on his own petard and, medically speaking, must swallow the concoction he himself has helped to brew.

Today, all college entrance examinations are divided into three parts: achievement tests, wherein a dozen fields of ignorance are examined; scholastic aptitude tests, which are the heart of the program, and the final calamity when the school administrator is given a peek at the results.

Can't Teach Aptitudes

As is proper, a great deal of abracadabra surrounds the Ceebs, and it is unfortunate that the school usually gets the blame when the candidate fails. While progressive educators are often convinced they can teach attitudes, it is doubtful that many have yet learned to teach aptitudes; yet it is in this sensitive area of aptitudes that parents are the most vociferous and unforgiving.

Fortunately, there are a few rules of gamemanship that the harried administrator may employ to manipulate his Ceebs. These rules include liberal use of an alerted guidance personnel, suggestions that the candidate take all possible "dry runs," Ceeb tutoring classes to encourage "examination shy" students and, in cases of extreme emergency, expulsion of the student before he reaches high school. Such heroic measures have been known to increase the school's reputation and the candidate's powers more than 50 points out of 800.

It is not suggested that the superintendent himself enter the examinations under an assumed name. Such a course would not only be illegal but probably disastrous; he might explore large areas of learning and word association he never knew existed. One further bit of advice he can offer to the candidate, however: As in all aptitude and personality tests available to

date, the candidate who displays conservatism, conformity, mild neuroticism, meager imagination, and lack of individualism is more likely to be the final winner.

Joining the Battle

Now is the battle joined. The initial softening up of the college admission officers has been attempted, the candidates have been briefed, and the parents conditioned. Final application blanks are now ready for review and reworking with desirable footnotes, photographs and last minute alterations. They should be signed in quadruplicate, properly sealed, sworn at, and rushed collegeward by air mail, special delivery.

Some time later, a cold and impersonal form letter of acknowledgement will be received from the registrar. It is impossible to believe that this merry and outgoing fellow could think up such an evasive reply, but his pressures are overwhelming and friendship has ceased. From time to time, additional letters of marque and reprisal will come from the college to be notarized and fingerprinted.

Meanwhile, the parents are becoming more disillusioned, impatient and demanding. They threaten to investigate the school and sue the board of education. They accuse the superintendent of senility, malfeasance and laches. They sneer at his former unfortunate statements of high scholarship, reputed influence, and a strong guidance department. They hint darkly that they are notifying Senator Kefauver and the Committee on Subversive Activities.

But all is forgiven when at long last a letter of admission arrives from the college. It is true that the parents often feel they have succeeded in spite of the delay and opposition of the school administrator but, being tolerant and long suffering, they are inclined to hold further recriminations in abeyance.

It is only at a later date, as sometimes happens when the youth is given the old heave-ho by the college, that the cold war starts again. But that is another story which need not dim the present jubilation.

It is hoped that many school administrators will profit by the techniques of college entrance here set forth. My one final admonition: Protect yourself at all times, watch out for low blows, and when the bell rings, come out fighting. ■

Preparing Teachers to Use A-V Materials

A. MONTGOMERY JOHNSTON
DOROTHY E. RYAN

Associate Professor of Education and Education Librarian
University of Tennessee

THE education library at the University of Tennessee combines a variety of materials to provide a convenient one-stop service for students, faculty and teachers-in-service. Books, periodicals, curriculum bulletins, and audio-visual aids have been brought together in a room 5000 feet square to offer service consistent with newer, more effective teaching methods.

Included among the audio-visual materials are: a record collection, with four adjacent phonographs equipped with earphones for individual listening; a tape recording collection with near-by playback equipment with earphones; a filmstrip collection with three previewing machines that do not require room darkening; a 2 by 2 inch slide collection with two previewing machines; large flat cases for filing maps, charts and posters; jumbo files containing a sample picture and pamphlet collection, and approximately 16 fonts of plastic and tile letters.

The printed materials in the library include a book collection of more than 7000 volumes; a reserve book collection; 120 sets of bound and current educational periodicals; reference materials; theses and dissertations in education; 88 file drawers of curriculum bulletins, including courses of study, syllabuses, tests, units and educational pamphlets; a textbook collection; current catalogs from universities and colleges with teacher education programs, and a large collection (6000) of all types of books found in good

Above, right: Fonts of tile and plastic letters in a choice of colors and sizes are available to staff and students for use on classroom bulletin boards, in hall display cases. Letters are checked in and out of the library just as books are. Right: Fifteen students may be accommodated at once in the library space provided for audio-visual work.

Below: Maps, charts and posters are filed in large flat stackable steel cases. The large number of sources for free and inexpensive materials make such facilities important.



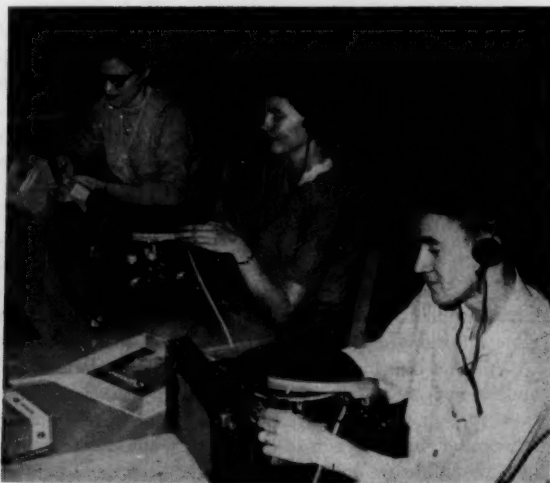
Teachers use many kinds of materials today in meeting the individual needs, interests and abilities of pupils. Books are essential for learning, of course, but books are no longer adequate as the sole medium of instruction in the modern integrated curriculum. The modern school library offers access to a wide variety of instructional materials: books, films, filmstrips, recordings and transcriptions, slides and other types of teaching aids—all properly catalogued for easy use.

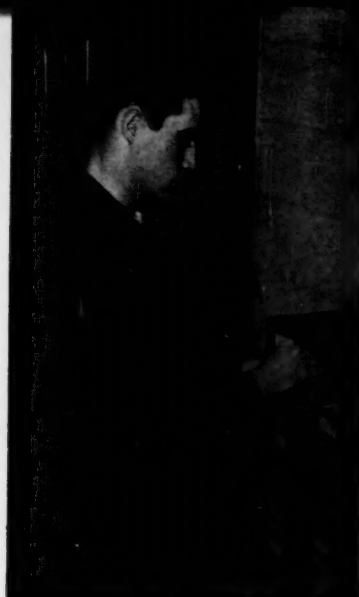
In planning the new education building at the University of Tennessee, this trend toward integration of the standard library collection and the audio-visual teaching aids was recognized and, as a result, the entire top floor of this million-dollar structure is devoted to the instructional materials center. Here our students are trained in the selection, utilization and production of instructional materials for the classrooms at every level and in all areas of learning. Through this expansion of services to teachers and pupils, the modern public school library becomes increasingly the "heart" of the entire curriculum.

N. E. FITZGERALD
Dean, College of Education
University of Tennessee

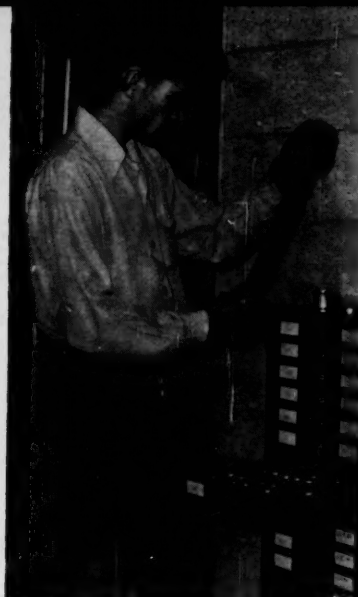


Photos by Reuben A. Hunter, Knoxville City Schools





These 2 by 2 inch slides are organized by sets under Dewey decimal classification numbers. Two previewing machines allow students to acquaint themselves with the teachability of slides.



Filmstrips are stored in removable trays in steel file cabinets that can be stacked on top of each other. The Dewey decimal classification is used. The viewing machines are on near-by tables.



Future teachers learn to appreciate the many uses of audio-visual aids, such as slides. They become familiar with operation of previewing machines, both types of which are always available.

high school and elementary school libraries.

About 150 students can use the library at one time. The room is furnished in blond hardrock maple, which has a dull finish to prevent glare. Lighting is unusually good, with windows on three sides and with fluorescent fixtures that provide a minimum of 55 foot candles on all work surfaces.

The stack room adjoining the reading room is open to everyone, and a conference corner is available for persons who need to work together with library materials. Acoustics is good because of the acoustical tile ceiling and concrete block walls.

The library is open from 8:30 a.m. to 10:00 p.m. daily, from 8:30 a.m. to 5:00 p.m. Saturday, and from 2:00 to 5:00 p.m. Sunday. Two full-time staff members are on hand during the day to help students and faculty use the library.

The A-V offices, equipment storage room, laboratory, preview room, and darkroom are located on the same floor as the education library. Also on this floor is the library service department, where students acquire training that certifies them for school librarianships in Tennessee. The education library services the materials for these areas and these areas, in turn, support and guide the collections and equipment in the library.

The presence of nonbook materials within a branch of the university library is a new development at the

University of Tennessee. Heretofore, the main library and its several branches have confined their activities to building, maintaining and promoting the use of printed materials.

The departure from this policy in the case of the education library illustrates the usefulness of having audio-visual materials in close proximity to books in an immediate teaching situation. A branch library in a large state university offers the opportunity to meet specific needs in definite localities on the campus. In the education library the need was for an assemblage of materials that would acquaint students with the various kinds of teaching aids available. ■



Above: Listening to recordings from the tape library increases the range of materials in sound from which education students may learn and study for teaching possibilities with children. Students can make their own recordings and listen to them. Left: Tape recordings are important supplements to the books, printed materials, and the disc collection that are combined in the education library. Recordings by students and staff and radio programs make up the bulk of the tape collection.

Neighborhoods Combine to Serve Exceptional Children

C. LEWIS MARTIN

Director, Area of Special Education
Brookfield, Ill.

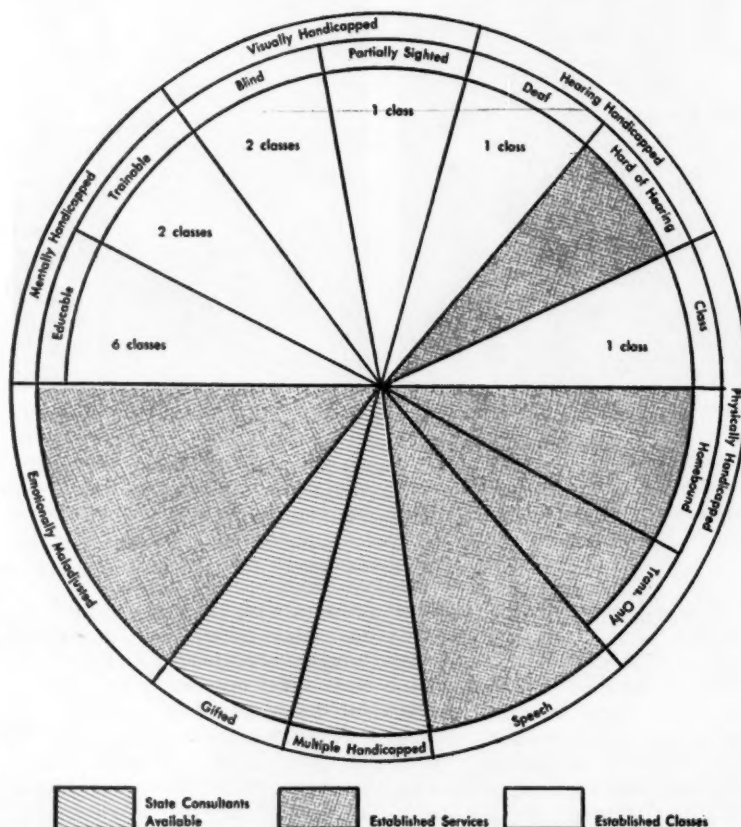
OURS is a suburban area that is handling its exceptional children in special classes in a way that is both exceptional and special. Or so we think.

About two years ago, 14 school districts in west suburban Cook County, Illinois, got their heads (superintendents) together and worked out a cooperative program of special education. These 14 districts—12 elementary and two high school—serve a population of 75,000, a fertile population in which 24,000 are children attending public schools.

In a small way, District 102 had been serving near-by districts in its classes for the partially sighted and for the educable mentally handicapped. District 102 had one each of such special classes and by 1956, in response to a survey, the blind children too were coming to La Grange for a special class in Braille.

The neighboring districts were paying District 102 the per capita cost of instruction of regular pupils in their own districts, and for the excess costs of operating the special classes District 102 was getting state aid. Even so, the money drained out faster than it trickled in.

Word came to Supt. J. E. Pease that several other school districts in the western suburbs of Chicago were, at considerable expense, transporting exceptional children to classes in Chicago, Oak Park, Berwyn and Elmhurst. In June 1956 he called a meeting—which proved to be the first of a series—of neighboring school superintendents to study the problem. From these



meetings emerged the cooperative program here described.

The setup is shown in Chart 1 and is briefly this: The 14 cooperating districts send their exceptional children to classes in five operating districts. The operating districts are those that provide classroom space and teachers for these special classes. To operate the entire program, an administrative district has been formed, and it employs the director of special education and provides him with office space and secretarial help.

A part-time director of special education was sought out almost immediately, and under his direction the building principals undertook a survey of exceptional pupils. This was in mid-1956. During the 1956-57 school year, District 102's three special classes were operating—partially sighted, blind and educable mentally handicapped, and District 181 had an E.M.H. class. Physically handicapped, deaf and trainable mentally handicapped children from the 14 districts were transported to special classes in Elmhurst, Oak Park, Berwyn and Chicago, and

meanwhile a search was going on for teachers so that the La Grange area cooperative program could open such classes in the fall of '57.

Throughout that first year (1956-57), superintendents of the cooperating districts met bimonthly as a board of directors to establish and review policies, to study the special education director's reports, and to develop the program further. Dr. Pease, superintendent of the administrative district (102, La Grange), served as chairman, and the director of special education was designated secretary.

CHART SHOWS CLASSES

This year's program (1957-58) is shown in the accompanying polygon chart. This chart shows that classes are now provided for each exceptionality except the gifted and the multiply handicapped. Thirteen classes are now operating in the five districts as follows: District 102, two classes for the blind, one for the deaf, two for the educable mentally handicapped, two for the trainable mentally handicapped, and one for the partially

sighted; District 103, one class for the educable mentally handicapped; District 105, one class for the physically handicapped; District 191, two classes for the educable mentally handicapped, and District 204, one class for the educable mentally handicapped.

The state of Illinois will provide consultant help for gifted and multiply handicapped children in the future, but as yet no state standards have been developed for these two particular programs.

Services for the emotionally maladjusted and children needing speech therapy are being provided by many of the cooperating districts. When needed, home instruction is also given. Presently all children with impaired hearing who are not profoundly deaf are being aided by speech correctionists in whatever way their particular hearing problem requires.

Policies Established

The cooperating program is governed according to these policies:

1. Superintendents notify the director of special education of available classrooms in their districts to be used for special education classes.

2. Special teachers are employed by the operating districts on the salary schedule of that district. They are recruited and recommended by the director of special education.

3. Teachers of all special classes are considered faculty members of the operating district and integral parts of the building staff where the class is located.

4. Special teachers are supervised by their own building principals and by the director of special education.

5. The director has his offices in Congress Park School, Brookfield, and is provided with a full-time secretary.

6. All furniture and equipment purchased for the director's office is paid for by the administrative district and is amortized on a 10 year basis.

7. The administrative district charges \$50 a month rental for the room used for the director's office.

8. Operating districts purchase and pay for all equipment and supplies used in all special classes.

9. The districts of residence sending pupils to special classes pay their proportionate full cost of operating the special class on an A.D.A. basis.

10. Furniture and equipment purchased for special classes is amortized on a 10 year basis.

11. Operating districts charge \$50 a month rental for special classrooms.

Pupils who would be forced to travel long distances to other communities are beneficiaries of this cooperative program of special education. Costs of operating the program are divided among the cooperative districts with some additional help given by the state.

12. The director provides the cooperating district with bulletins describing the steps required for enrolling each type of exceptional child, as well as bulletins outlining steps to be taken in establishing special classes.

13. The cooperating districts annually get the approval of parents enrolling pupils in special classes.

14. All referrals for psychological testing are made to the director, who makes the necessary arrangements with Illinois' northeastern area qualified psychological examiner for testing, staffing and pupil assignments.

15. The districts of residence make their own transportation arrangements in cooperation with other cooperating districts, and submit their own pre-approval claims for transportation only. The office of the director assists the cooperating superintendents on their requests.

16. Pre-approval claims are filed by the operating districts but are prepared by the director.

17. The age of admission of all handicapped children is the same as for children without handicaps except in very special cases where state consultants recommend earlier admission.

18. Quadruplicate application forms for enrolling handicapped pupils in special classes are submitted annually by the cooperating schools' superintendents.

19. Pupils residing in the cooperating area have first priority in all special classes.

20. Out-of-area districts are billed \$50 per pupil for administrative costs. (This enrollment fee may prove inadequate in the future.)

21. Specific policies pertaining to each exceptionality have been made.

Must Interpret Program

To the cooperating districts goes the work of interpreting the special education program to the community. They too assist in arranging transportation to the special classes.

The operating districts, besides providing and equipping a proper classroom and employing the teacher,

establish policies of integrating the exceptional children with the other children and the building personnel, maintain cumulative files of pupil records and individual case studies, and maintain accounting records as the basis for apportioning costs of the program. The operating district has the final say both as to size and pupil personnel of the special class.

The administrative district, in addition to employing and housing the director of special education and his secretary and taking care of their expenses, maintains an accounting system to determine the actual costs of operating the director's office and prorates the costs of the office among the cooperating districts.

The scope and limits of the duties, responsibilities and authority of the director of special education are defined by a steering committee, composed of the superintendents of the participating districts or the superintendents' designated representatives.

District's Needs Studied

The director's job includes studying the needs of each district in the area of special education, determining what classes are needed and how many, finding school districts that will operate the classes, helping the superintendent of such a district to establish such a class, recommending to the superintendent a suitable teacher, supervising the teachers, preparing application forms and reports, determining pupil eligibility, and counseling with superintendents of cooperating districts and with principals, teachers and parents.

This year 122 pupils are enrolled in special education classes. Of these 67 are educable mentally handicapped; 20, trainable mentally handicapped; 13, blind; 9, physically handicapped; 7, partially sighted, and 6, deaf.

Before the coming fall term the program hopes to have a full-time qualified psychological examiner on the director's staff. At the present time private examiners are being used with parents or others paying the cost. The director of special education will continue to serve next year on the present half-time basis. Two additional classes for the educable mentally handicapped are needed—one at the primary and the other at the junior high level—and one more class for the trainable mentally handicapped is proposed.

Much work lies ahead, but in its first two years the cooperative program has made good headway. ■

Redistricting Is State Obligation

An interview with W. D. McClurkin

Director, Division of Surveys and Field Services
George Peabody College for Teachers, Nashville, Tenn.

IT IS unrealistic to expect administrators of a school district to profess that their system is inadequate, or to initiate a merger that may offer them less personal security than the present organizational structure."

This is the opinion of W. D. McClurkin, director, division of surveys and field services, George Peabody College for Teachers, Nashville, Tenn., and secretary-treasurer of the National Council on Schoolhouse Construction for the last 12 years.

Dr. McClurkin expressed his beliefs on school district reorganization to an editor of *THE NATION'S SCHOOLS* upon his return from meetings with representatives of school districts far from his home base. Generally reticent to publicize his opinions on specific educational issues, he voiced "thorough dismay" with the antipathy toward school mergers indicated by local participants.

Favors Involuntary Redistricting

After firsthand study over a quarter century of scores of school systems as a survey director, he has concluded that *involuntary* redistricting "is the effective solution to the merger problems that today confront many school systems." He continued:

"I see the problem more clearly than ever before. I am convinced more firmly than ever before that the effectual way to arrive at redistricting of school systems is determination at the state level by legislation or criteria of state departments of education.

"Education of the children is the sovereign obligation of the state. The state in the first place divided itself into school districts to expedite the carrying out of its educational obligations; thus the state has every right to *redefine* its districts whenever the original district borders are found to

be impractical as a result of interim changes and developments."

"Dr. Mac" has no objection to the small school, not even the one-teacher school, if that is the best the community can provide. But if the stature of citizens is such that better opportunities are desired and required, but cannot be realized under the present financing system, the advantages of redistricting should be considered, he believes.

The merged district, he points out, is an administrative and service unit that makes possible more efficient staffing, curriculum offering, and administration. The larger area permits programs and services that a smaller school unit cannot afford.

To provide the type of educational program which the present opinion of educators indicates is desirable, the minimum school district should operate from kindergarten through high school, and its enrollment should be no less than 1200, Dr. McClurkin said. The impression he gives is that the minimum figure should be considerably larger. Economic pressures make action necessary where, without effecting a major reorganization and providing a more efficient educational structure, there are not sufficient funds to do all the things that almost everybody agrees should be done in the schools, he stated.

Director McClurkin stressed that merging school districts does not involve the questions of whether a given school should be continued or closed, or where schools of the enlarged district should be located. These decisions will be left to the local unit, more particularly to the leadership in the redistricted area.

Hearkening back to his thesis that involuntary redistricting by state legislatures will be necessary in many in-

stances, Dr. McClurkin stated that the democratic process is desirable for attendance areas at the local level, but that it alone is not always adequate.

Here he referred specifically to the recommendations of the A.A.S.A.'s commission on school district reorganization and to the emphasis being placed on the development of intermediate units in Wisconsin, Illinois and other states. The emphasis on the county as the intermediate unit, he believes, is tacit agreement that local determination perpetuates inadequate districts that need bolstering, and serves to retard the redistricting that eventually must come anyway. It "merely adds superstructure, which tends to make an already complex problem more complex." He fears, too, that the plan of the A.A.S.A. commission to leave reorganization to local units will not result in the desired action *quickly enough*.

How Large Is Too Large?

As to the upper limits of redistricting, Dr. McClurkin reported that in some western areas geographical sections as large as two ordinary counties have been formed into a single new school district by legislative action. The largest district he knows is Elko County, Nevada, where Loyal V. Norman is superintendent. This state consolidated area runs 150 miles east and west and 120 miles north and south. The 17,127 square mile area is supervised by a seven-man elected board of education. According to board members interviewed by Dr. McClurkin, no difficulties have resulted from the redistricting itself, although admittedly there have been some debatable decisions within the organizational framework. No final evaluation had been reached as to the outcome of this redistricting experiment. — L. E. B.



SCHOOLHOUSE PLANNING

The present style of workroom is shown by this alcove in the addition to Harding Elementary School in Hammond, Ind. It is recessed from the classroom.

Alcove Workroom Developed in Three Patterns

LEE E. CALDWELL

JUST about every program in an elementary school requires some work space separated from the classroom, but still near enough to permit close teacher supervision. The broad scope of children's interests, backgrounds and abilities requires facilities for a wide range of simultaneous activities. Yet this variety of activities carried on by individual pupils and groups must not be permitted to disturb the rest of the class.

Just what form should this work space take for best results?

At Hammond we have been experimenting with some solutions to this question for more than a decade. By a three-step process the *alcove* type of workroom space has evolved. It was introduced for the first time at the new Lafayette Elementary School and in the Harding and Caldwell additions. Preference will be given this type of facility in future construction. Warren Holmes Co., architects and engineers of Lansing, Mich., designed the structures.

In planning workroom space at Hammond, we kept in mind those

activities that seemed essential. Here are some of them.

Essential Activities

► Sometimes children need to work in small groups or on individual projects without disturbing the rest of the class.

► Children need to carry on committee work for various school subjects, especially in science and social studies.

► They want to act out plays or dramatizations.

► Children, especially in the lower grades, enjoy reading aloud to one another.

► Children working in pairs can check each other on arithmetic facts and on spelling.

► Children who work best with their hands achieve success by working on projects. These take time to complete and must be saved.

► The emotionally disturbed children can become so absorbed in working with their hands that their energies and emotions are released.

Our first workrooms were built in 1947, at the Harding and Wilson elementary schools. They were fitted out with a bulletin board, one storage cupboard, and one sink, and largely served small groups working on school subject materials. Similar workrooms were built a little later in both the Porter and Caldwell elementary schools.

As the facilities were used, many additional activities developed.

The workrooms were found to be of great value in developing the habit of self-discipline and self-direction.

Children could work on science experiments that required time to complete, and these experiments could remain undisturbed until finished.

Good human relationships developed when children worked together for a common purpose.

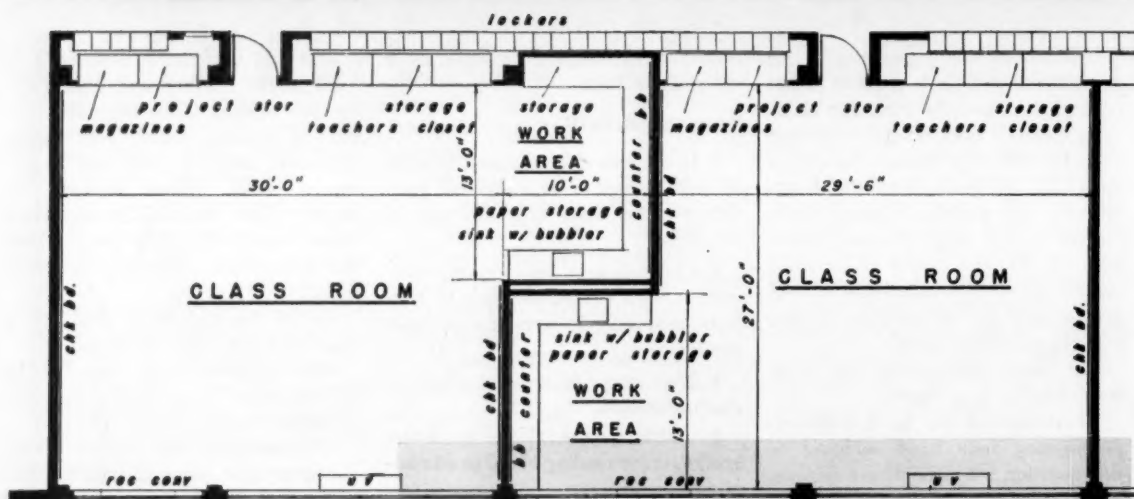
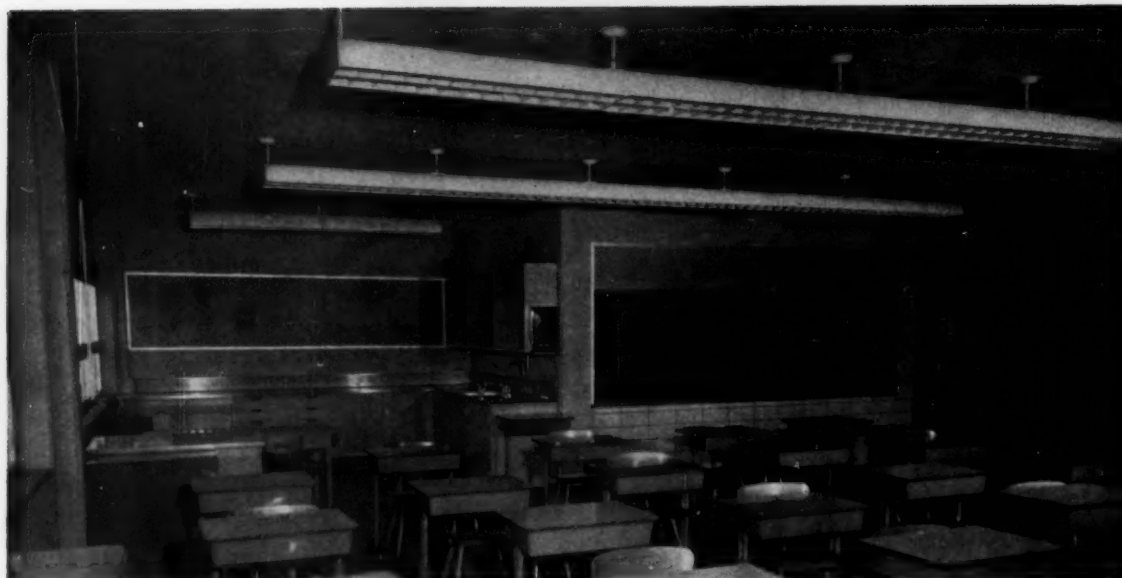
Children could work on large murals and pictures for which there was no classroom space.

Some teachers found that workrooms were an ideal place for teaching a reading group. Then when the next group's turn came, the work was fresh.

The first workrooms were shared by two adjoining classrooms. Teacher observation from each classroom was possible through a glazed panel, which was offset to prevent pupils from seeing through from one room to the other. Some teachers felt that this glazing was not needed in a well controlled school, since one of the school's main objectives is the building of self-discipline in pupils.

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To have two teachers and their classes share the one room required occasional adjustments, some scheduling of use, and some limit on their activities.

About this time a new Indiana state code stipulated a minimum classroom size of 875 square feet of clear floor area. This made it feasible to include the work space within the classroom. Therefore, the next group of structures was designed without partitions. A movable counter and a separate built-in sink were provided within the classroom itself. The elimination of the separating partition resulted in some savings. Also, there was greater flexibility. But the arrangement proved to be somewhat cumbersome and the amount of storage and work space provided was inadequate. The lack of a real separa-

The classroom picture above shows the workroom as a recessed area of the main room. While figured within the 875 square feet of clear floor space required by the Indiana state code, the permanent, semi-detached area makes possible noisier activities without the pupils who are reciting or studying in the classroom being seriously disturbed.

Floor plan shows the relation of a pair of workrooms of the alcove type to their respective classrooms and to each other. Together the two work spaces extend the width of one classroom, separated by a cross partition. Each recessed space has an area of 10 by 13 feet. Along the door side of both classrooms, extending the full room length and backed by lockers, is project material and magazine storage, and a teacher's closet. Malcolm Williams, A.I.A., of Warren Holmes Co., architects and engineers of Lansing, Mich., designed the building.

tion was felt. Too, it was difficult to leave lying out the children's unfinished projects.

Current Version

When the new Lafayette Elementary School and the Harding and Caldwell additions were planned, it was decided to keep the work space a part of the classroom but to recess it from the main classroom area. This would permit each room to have semi-detached, permanent work space where materials could be left out without likelihood of disturbance and where noisy activities could be held.

The alcove type of workroom was the result. The arrangement permits good supervision of activities, offers some flexibility in floor area, and is helpful for dramatic activities. Most teachers prefer permanent separation for convenience and housekeeping.

The floor area of the alcove is roughly only half that provided in the original workrooms. The plan provides two alcoves in one classroom width. This means that the inner alcove is without an outside window. Since the corridors are double loaded and the buildings are more than one story high, this could not be overcome. This lack of a window has hampered our science work.

The details of work counter and storage space that earlier experience had shown to be desirable are provided. Of course, both pupils and teachers like the sink in the work counter proper and the bubbler.

Easier to Clean

Custodians feel that the alcove is easier to clean except now and then when overflow from sink or fountain spreads into the classroom.

The administration likes the alcove arrangement because of its economy in meeting state requirements for floor area and the omission of the separating partition. Assuming the same storage and work surface, the only real addition to cost is the cross partition between the two alcoves—not more than \$150. Most teachers prefer a separate workroom for each classroom, even if it is a little smaller; they would further recommend that the room be separated from the classroom by a folding door. This door would be helpful in dramatic productions and would give privacy.

All in all, our experience with workroom space in Hammond has been most satisfactory. The plan has stimulated both pupils and teachers to constructive and creative work. The workroom space has proved to be valuable in all kinds of classwork. ■

Right: This second type of work space was designed to fit within the classroom. There is no separating partition, but a built-in sink is provided. This view at Wilson School shows how the movable counters are pushed together to form a single work corner for pupils.



Left: This workroom at Porter Elementary School is typical of the original design. It is a separate room equipped with a bulletin board, a storage cupboard and sink, and is shared by two adjoining classrooms. A glazed panel offset prevents the pupils from seeing from one room to the other.

Wanted: More and Better Research for Schoolhouse Planning

HAROLD SILVERTHORN

THE planning of school buildings can be improved only as we understand the nature of children. However, the research pertaining to the growth and development of children seems to be proceeding at a much faster rate today than studies relating to the architectural and engineering prospects of schoolhouse planning.

Such research as is being done in the school building field is spotty. A candidate for a master's degree prepares a questionnaire; it is answered by sundry persons, and the student tabulates the results for his thesis. Research by candidates for doctoral degrees on problems in the school building field also is very limited in scope and often inadequate in valid documentation.

Many Steps Involved

There has been so much indiscriminate talk about research that perhaps we ought to agree upon a definition of the term. Dictionaries make clear that research is not merely a search for truth, but a prolonged, intensive, purposeful search. Research is a method for the discovery of truth, which really is a method of critical thinking. It comprises defining and redefining problems; formulating hypotheses or suggested solutions; collecting, evaluating and organizing data; making deductions

and reaching conclusions, and, above all, carefully testing the conclusions to determine whether they fit the formulated hypotheses.

Research involves an attitude of mind and a planned approach to problem solving. The descriptive method takes many forms such as a survey, continuity check, case group study, job and activity analysis, documentary or informational analysis, legal research, and other types of reflective thinking. Experimental research takes two forms: The first uses individual changes in development, and the second uses group situations.

Most of the research in the school building field is of the experience type. A superintendent, a school manager, or a school building specialist will write a magazine article or a book based primarily on his own observations. The chief fault with such literature, including the bibliographies, is the fact that related material is not listed. For example, references are not made to the studies and recommendations of the Bureau of Standards, although much of its findings would be applicable to schoolhouse planning problems. It would be a great help if the publications of the Illuminating Engineering Society and the American Society of Heating and Air-Conditioning Engi-

neers, and the publications of all commercial groups that have conducted research on schoolhouse construction could be listed, studied and evaluated. Particularly, there is need for all the information available on the problem of acoustics.

Experiments Not Controlled

Comparatively little *controlled* experimentation is being done. This kind of research would involve building mockups of classrooms and studying them on a comparative basis. Some worth-while research projects could analyze new buildings for their lighting characteristics, functional use, environmental conditions, and traffic flow. Theoretically, architects do this, but their research is a judgment type of process performed in the act of planning buildings.

It is fairly extensive practice in some parts of the country to use light meters for testing brightness of school lighting, but actually many factors are included in the visual environment of the classroom and all of them should be identified and measured. Even greater is the need for research as it pertains to ventilation and acoustics in the schoolroom. We need an adequate portable measuring device that can be taken into rooms to analyze air conditions.

Business and industry today is spending from 1 to 10 per cent of its operating budget on research. But I doubt if even one-thousandth of 1 per cent of school budgets is spent on building research. The little research that is being conducted is sponsored largely by universities, or by industries interested in the school market. Most school boards are not spending a nickel on research for the improvement of the school plant.

Another serious weakness is the lack of liaison among groups having an interest in school building. Such



Harold Silverthorn, president of the National Council on Schoolhouse Construction, is director of buildings and properties, Gary, Ind. Before going to Gary, Mr. Silverthorn was consultant on school building, Washington State Department of Public Instruction. More than 700 school buildings were planned, financed and constructed from 1950 to 1956 when Mr. Silverthorn was in Washington. In Gary, six buildings have been completed, six are under construction, and six are presently in the final plan stage. He has been a school building consultant for several A.A.S.A. meetings and for a National School Boards Association meeting.

cooperation, if it occurs, is mostly incidental. It is axiomatic to say that a school building is designed to house an educational program. It would seem only logical that efforts would be made to get the best educational opinion as to what constitutes a good educational program and then to seek further advice as to how to adapt such activities to the local area. Occasionally this is done. Often, however, a program once adopted in this manner continues in the same pattern a long time before again being evaluated and revised.

With the extensive construction programs now taking place on the campuses of universities and colleges, considerable information applicable to improvements in schoolhouse construction is being accumulated. To my knowledge, no agency exists to coordinate or exchange such information. The one medium to which one can turn for some information on these developments is the educational and architectural magazines.

In my judgment, the best collection of informed opinion and reported experiences on the subject of schoolhouse planning is found in the publications of the National Council on Schoolhouse Construction. Its "Guide to Schoolhouse Construction" is used widely by school planners and architects; yet even this publication has a compilation of group experiences of its members, and this is strictly subjective judgment.

Another source of information is the work done by individual architectural firms comprising the American Institute of Architects. While this organization sponsors some research, most of its research is of the information gathering type rather than basic experimentation. In fact, most architects use the word "research" as meaning a study of current literature.

Industries sometimes sponsor research at universities as well as in their own laboratories. Apparently very few of these studies are directed toward school buildings. Any information that grows out of such research is almost always incidental.

Accompanying this article I have listed some of the studies that I believe are to be made, dealing primarily with architectural engineering and with the financial phases of school planning and construction.

I also suggest that more effort be made to interpret the research studies of various science, mathematics and

physical education groups, to determine the extent to which their recommendations have implications for schoolhouse planning. Greater correlation could be made to the various publications of the N.E.A. and the A.A.S.A.

Also helpful would be a bibliography of literature on city planning and long-range school planning, particularly as it relates to school sites and arterial highways. Lessons could be learned from restaurants and hotel managers associations. ■

Research Is Needed in These Areas

COST DETAILS

- Standard practice procedures for cost accounting on school construction.
- Standard methods of estimating unit costs of construction.
- Current practice of estimators in taking off material and labor costs on school buildings.
- Study and analysis of quantity survey technics used in Europe.
- Correlations between standard practices of estimators and the actual cost of construction.
- Comparative cost data on labor and materials in a structure.
- Man-hours of labor necessary for different types of construction. (Actual unit cost figures for application of various materials should be accurately determined.)
- Man-hour production of various trades.
- Ways of simplifying buildings.
- Modular construction, paneling and prefabrication of large units.
- Increased man-hour production from the repetitiveness of detail.
- Cost studies of off-the-job fabrication of such items as classroom cabinets, compared with built-in cabinets constructed with hand tools.
- Analysis of different construction technics and potentialities for application to school buildings.
- Factors influencing bidding.
- Relationship between number of trades involved in a project and cost of construction.
- Relationship of number of subcontractors to bids received.

ARCHITECTURAL STUDIES

- Improved evaluations of existing structures using objective criteria. (Emphasis on adaptability of the school to house a particular educational program.)
- Cost and advantages of single story and multistory building; cost of site; space requirements.
- Comparison of structural systems.
- Possible economical and functional layouts of school buildings.
- Analysis of different type plans such as U-shape, E-shape, finger plan, and campus plan.

- Psychological aspects of the school as to the color, acoustical treatment, proper ventilation, and homelike atmosphere.
- Space allocations and sizes for high school areas.
- Ways of achieving flexibility in school building.
- Comparison of maintenance costs on different types of construction.
- Study of the elements that constitute beauty. Formulation of criteria that constitutes esthetics.

ENGINEERING STUDIES

- Analysis of different heating systems, for example, radiant heat, low-pressure and high-pressure steam and hot water, with a comparison of original cost with maintenance and operation costs.
- Study of incandescent lighting, fluorescent lighting, cold cathode; initial cost and efficiency comparison.
- Cost, wearing and maintenance characteristics of building materials for school buildings — brick, concrete block, tile, woods.
- Cost, wearing and maintenance characteristics of chalkboards, tackboards, floor covering, hardware, wall covering, ceiling material.
- Study of classroom ventilation.
- Study of classroom acoustics.

SCHOOLHOUSE PLANNING

- Class size.
- Learning processes.
- Needs and interests of children.
- Child growth and development.
- Housing handicapped and gifted.
- Grouping in classrooms.
- Audio-visual devices.
- Outdoor play activities.
- Site utilization.
- Playground equipment.
- Furniture, size and shape.
- Space relationships.
- Space dividers.
- "Teaching walls."
- Electronic sound barriers.
- Background music.
- Intercommunicating systems.
- TV and the classroom.
- Instructional material center.
- Health unit.

School Bus Standards Can Vary

LEE O. GARBER

Director, Educational Service Bureau, University of Pennsylvania

CREATION of larger school districts has resulted in increased emphasis on transportation. Some of this emphasis is evidenced by legislative enactments, the constitutionality of which is sometimes questioned.

In California, a taxpayer recently questioned the constitutionality of legislation that set up standards for school buses to be met by carriers operating under the jurisdiction of the Public Utilities Commission or operated by and under the exclusive jurisdiction of any municipally owned transit system different from those to be met by private individuals who provide bus service on contracts with the school board.*

The taxpayer's action was to determine the legality of a contract between the San Diego Unified School District and the San Diego Transit System and to determine whether funds paid by the district to the transit company under the contract were being legally expended. The lower court dismissed the action and the plaintiff appealed.

The real question at issue was the constitutionality of a statute. The school district furnished transportation by regular bus service provided for under contracts let on bids. The transit company, holder of the contract in question, was a California corporation, operating a regular bus system on established routes, under a franchise from the city of San Diego. It was subject to and operated under the jurisdiction of the California Public Utilities Commission.

The school district had let the contract after advertising for bids, the specifications for which required all bidders to comply with all regulations of the California State Department of Education that applied to school buses, to furnish proof that the buses used had been accepted by the California Highway Patrol and met all applicable regulations of the Cali-

fornia Vehicle Code, the California Education Code, and the Department of Education for school buses.

However, the specifications also provided that these requirements did not apply to motor vehicles subject to and meeting all requirements of the California Public Utilities Commission operating as carriers under the jurisdiction of the commission as provided for in the Education Code, Sect. 16273.

The plaintiff alleged that the discrimination evidenced in the bid specifications was unlawful as was, of course, the payment of public monies under the contract. The regulations of the Department of Education, from which the transit company was exempted, were detailed and probably somewhat burdensome to a bidder. They related to such things as drivers' qualifications and reports, number of pupils to be carried, standees, seating space, inspection by the highway patrol, emergency exits, identification of buses, first-aid kits, rear-view mirrors, and seats. Apparently, the transit company did not comply with many of these regulations.

The Education Code, in the section in question, defined school buses and provided for three exceptions to this definition. "(1) Motor vehicles of the pleasure car type designed for and when not actually carrying more than seven pupils and the driver; (2) motor vehicles subject to and meeting all requirements of the Public Utilities Commission, operated by carriers under the jurisdiction of the commission; (3) motor vehicles operated by and under the exclusive jurisdiction of any municipally owned transit system if said transit system meets all the safety requirements of the commission but not used exclusively for the transportation of public school buses." It also provided that while school buses must comply with the state department's regulations, the three exceptions need not. The court held that the exceptions were not discriminatory.

In its decision, the court noted that there was no evidence that the transit system operated its buses in violation of any regulations of the Public Utilities Commission. It also pointed out that many pupils used regular bus lines to and from school. In commenting on the various statutory regulations involved, the court concluded that its purpose was "to promote the safety of school children being transported in vehicles and the legislature has accepted the standards which the California Public Utilities Commission has prescribed for the safe transportation of the public, including pupils of the public schools."

With respect to the discriminatory aspect of the statute in question, the court stated that it was "general and statewide in its application," and that "no class or individual is given preference over any other individual or class."

No Discrimination Allowed

While it is a general principle of law that the legislature may not enact legislation that discriminates against individuals or classes, it may make classifications if such are reasonable and if all within the same classification are treated equally. With respect to the legislature's authority in this respect, the court said:

"Wide discretion is vested in the legislature in making the classification and every presumption is in favor of the validity of the statute; the decision of the legislature as to what is a sufficient distinction to warrant the classification will not be overthrown by the courts unless it is palpably arbitrary and beyond rational doubt erroneous; a distinction in legislation is not arbitrary if any set of facts reasonably can be conceived that would sustain it. The existence of facts supporting the legislative judgment is to be presumed and the burden of overcoming the presumption of constitutionality is cast upon the assailant." In commenting on the plaintiffs' allegation that the statute puts the

**Willingham v. San Diego Unified School District*, 315 P. (2d) 368 (Cal.).

transit system in a favored position with respect to bidding, because it gives it special exemptions, the court pointed out that it did "not discriminate in favor of one or more carriers against others." Likewise, it did not "operate in favor of one municipally owned transit system as against another." Nor did it "place heavier burdens on one or more individual [sic] operating school buses than it does on others." Instead, it classified various types of transportation equipment, and "these classifications . . . appear reasonable, consistent and essential . . ."

Finally, in concluding its reasoning, the court quoted the following: "The equality of the constitution is the equality of right and not of enjoy-

ment. A law that confers equal rights on all citizens of the state, or subjects them to equal burdens, is an equal law. . . . as long as the statute does not permit one to exercise the privilege while refusing it to another of like qualifications, under like conditions, it is unobjectionable upon this ground."

From this it may be concluded that the legislature, in its attempt to help solve the transportation problem, may provide for various types of school transportation and may require different types to obey different regulations. In so doing, however, its basis for classification must be reasonable, and the statute must apply equally to all who fall within each specific classification. ■

transportation of parochial school children enrolled in Grades 1 through 6 by the regional district. On April 8, 1957, the commissioner wrote a letter to the regional board in which he noted that it had continued to provide transportation for the lower grade pupils, and he pointed out that it must discontinue this practice or the county superintendent would be obliged to disapprove the transportation and state aid, therefore, could not be received.

On May 7 of that year the regional board appealed to the state board of education, which in turn affirmed the commissioner's action. This appeal was then brought. As was stated, the constitutionality of the statute requiring school boards to transport parochial school children along with the public school children was not being questioned.

In its decision the supreme court reversed the ruling of the state board of education (which had supported the commissioner's ruling). In so doing it pointed out that the law did "not recognize any distinction based on the grades being attended by the school children who are resident within the district and seek transportation along the established school route." In so ruling the court called attention to the fact that in the famous *Everson* case the board of education of Ewing Township maintained classes through Grade 8 only, although it transported public school students beyond that grade to the public high school in Trenton. It also made arrangements for the transportation of resident parochial school children to Trenton. Yet the higher court upheld the arrangements "even though they included pupils in the elementary grades of the parochial school as well as pupils in the high school grades."

The respondent in its brief asserted "that the transportation of elementary parochial school children along regional junior-senior high school bus routes will entail large public expenditures and that disapproval of the commissioner's restrictive interpretation of . . . [the statute] will discourage the establishment of such regional schools."

The court rejected this contention. In so doing, it pointed out that respondent offered no supporting data "and, in any event, these are statutory policy matters for legislative rather than judicial consideration." ■

Free Ride for Every Child on Bus Route

THE supreme court of New Jersey recently decided a unique case involving a question growing out of the transportation of school pupils.¹

In that state for a number of years a law permits boards of education to provide for transportation of pupils living remote from any schoolhouse. Among other things, this statute states that, when a district provides for transporting pupils, "Transportation from any point in such established school route to any other point in such established school route shall be supplied to school children residing in such school district in going to and from school other than a public school, except such school as is operated for profit in whole or in part."

In other words, this statute made provision for transportation of children to parochial schools. Needless to say, its constitutionality was questioned in the courts. In *Everson v. Board of Education of Ewing Township*, 133 N.J.L. 350 (1945), the supreme court of New Jersey upheld the constitutionality of this statute. The case was then carried to the United States Supreme Court, which upheld the state court's ruling — 330 U.S. 1 (1947). New Jersey has had no further litigation.

While the case under consideration involved a question of transporting

parochial school children, the question of the constitutionality of the law was not raised. "The single issue is whether the language . . . [of the law] construed in the light of its legislative history and judicial interpretation in *Everson*, grants statutory power to a regional district to transport resident parochial school children along the established public bus routes even though some of the children are in grades below those for which the regional district was established."

In September 1956, a newly formed regional high school district, Central Regional High School District of Ocean County, began operation. It assumed the responsibility for providing transportation for students to the junior and senior high school in Berkeley. It also provided transportation for those children residing in the regional district who attended St. John's Parochial School. The transportation was being provided to the parochial school children without regard to whether they were in Grades 7 through 12 or whether they were in grades below these.

A complaint was made by a resident of the district to the state commissioner of education concerning the matter, and he advised the regional board on Feb. 4, 1957, that it was not authorized to provide transportation for those pupils enrolled in grades lower than those for which the regional district was organized. In other words, he disapproved the

¹Board of Education of the Central Regional High School District of Ocean County v. State Board of Education of New Jersey, Supreme Court of New Jersey, No. A-124, September Term, 1957.

Practice often denies theory in

Athletics Funds Accounting

A JURY SURVEY BY THE NATION'S SCHOOLS

WITH the trend toward viewing athletics as only one phase of a school system's cocurricular activities program, the practice of granting athletic department personnel preferred group status in handling funds is fast disappearing.

Good accounting practice today dictates that financial control of these funds rest with the board of education and that related record keeping be a part of the school district's general accounting system.

Yet the spread between theory and practice remains great, and the methods of dealing with receipts from athletic events are as varied as the number of systems involved. If any national pattern of school athletic activities accounting is emerging it is still nebulous.

This article will give the major conclusions reached from a series of cross-country surveys of current practice made by *THE NATION'S SCHOOLS*, in cooperation with a jury of school business officials. In the jury were representatives* of school business departments in 15 states and the province of Ontario. Enrollments of the districts ranged from 2000 to 278,790 for elementary schools and from 540 to 277,180 for high schools.

The first of five questions asked the business officials was:

1. In your opinion, should the athletic department be permitted to handle its own funds, or should these funds be dealt with as a part of the general funds of the school?

*The 40 respondents used the following titles: business manager, business administrator, or director of business affairs, 15; administrative assistant in business, assistant superintendent of business, or assistant superintendent of school facilities, 3; assistant superintendent, 3; secretary-business manager, 4; secretary and secretary-treasurer, 3. One each used one of the following titles: deputy controller, auditor, school district clerk, administrative assistant and director of research, purchasing agent, business assistant, assistant clerk, and director of plant operation and maintenance.

One-fourth of the respondents appeared to be bucking the tide with their reply that athletic departments should be allowed to set up their own funds. Noted were various degrees of conviction, with some indications of deep feeling.

Going all the way, one business administrator stated: "Athletic department officials should handle their own funds. It is strictly their business, and they should not have to turn their receipts over to the board nor should they have to obtain the board's approval of accounts."

A more moderate position was that the athletic department should handle its own funds provided "the department is responsible to the school principal and is helped in its operations by an athletic advisory council." There was one Yes vote because: "The danger of appropriating the monies for other purposes is great, once it gets into the general fund. Athletic funds should be used for athletics."

One representative from a smaller district was agreeable to his school's present plan of depositing athletic funds in a special "after-school athletic trust fund" account set up by the school board, and another thought well of its current practice in which the athletic department handles its own monies under a budget approved by the business manager.

But the large majority of business officials (74.3 per cent) was equally vocal in support of the position that school athletic funds should be handled as part of the school's general accounting system. Representative of the more outspoken respondents are these replies: "Accounting should not be of primary interest to athletic department personnel, and funds had better be kept by persons removed from the athletic picture," and, "Athletic department officials do not have the time for or an inclination toward good business practices."

A generally shared view of this group is that it is the responsibility of the school board to safeguard school funds and that the authority should rest there. Other reasons stated included: "For economy and efficiency," "to relieve athletic department of accounting procedures," and "otherwise there is a question of bonds auditing and properly accounting for the funds." In at least one case, state laws mitigate against the handling of funds by athletic officials.

The second question brought the problem into sharper focus. It was:

2. Assuming that athletic funds are under the general financial control of the school, should receipts be deposited in a separate bank account, or should they be handled by a special accounting device as part of the general school bank account?

Assured that the school system was holding itself generally responsible for athletic funds, 38.5 per cent of the jury members were agreeable to some sort of physical separation of athletic funds, compared with only 25.7 per cent who favored the outright separate handling of such funds by the athletic department. Even so, almost two-thirds (61.5 per cent) preferred to include athletic fund receipts in the general bank account.

At this point the line of demarcation becomes less clear, the votes in favor of the "accounting device" being based on two different premises.

The first premise is that the athletic department program should be subsidized by the school district, that all athletic department expenses should be met from the general fund of the district, and that proceeds from athletic activities should flow into and become merged with the school's general fund.

The second premise is that while athletic fund records should be part of the general school accounting sys-

tem, the identity of the funds should be maintained.

A separate business manager for athletics, serving under the general supervision of the school's general accounting officer, is considered desirable by some respondents.

Further differences of opinion among those agreeing that athletic funds should be under the financial control of the school's general accounting system came with replies to the third question, which read:

3. At the close of the season, should any unused athletic funds be accumulated as a reserve for future years, or should such residue from athletic activities (profits) be credited to the general fund at the close of the season?

Some did not answer this query. They pointed out that this assumption is unusual, a profit from athletic activities being rare. Others believe that any residue should be spent for supplies and equipment for the coming season before the books are closed.

Of respondents who answered this question on the basis of the principle involved, two-thirds (64.1 per cent) believe that any unused athletic monies *should be* accumulated, at least up to a certain point, in an athletic subsidiary account of the general fund, such as a clearing account. The remaining third is in favor of the year-end transfer of all net proceeds from athletics to the general fund, to help offset deficits in other cocurricular activities accounts.

Opposition Arguments

Those who oppose the accumulation of athletic fund reserves do so for various reasons. Some point out that, if athletic resources are processed to the general fund, the governing board of the school district is guaranteeing the financing of an adequate program, which makes reserves unnecessary. Another business official states that if the athletic program is regarded as part of the school curriculum, as are music and industrial arts, financing is assured and a reserve fund will not be needed.

At least one state makes obligatory the crediting of residue from athletic activities to the general fund.

Certain districts make no transfer to the general fund but pay out of the athletic fund monies to help finance other activities in the school. Regardless of the method followed, the school principal should not be deprived of the privilege of using some of the surplus from athletics for other activities, various respondents stressed.

Among those favoring the accumulation of residue from athletic activities are those who hold that the

athletic department should be a separate, self-supporting entity. Under this arrangement they consider it necessary to hold on to the profits from any one year as a buffer against possible losses in other years. This point of view is shared by those who, while agreeing to over-all school control of athletic funds, consider student body funds apart from general accounting.

The over-all consensus of the respondents seems to favor the accumulation of an athletic fund reserve within the framework of the general fund accounting, a plan served by the use of clearing accounts.

Where limitations on the amount of the reserve are suggested, no specific ceiling is indicated, the latter being left to the nature of the local athletic program and the extent of effort being made to reach all students with the physical education program. At least one business official thinks that any accumulated profit should reduce budget requests for the future.

ords and those voting for central accounting control. Suggested, too, was the compromise of issuing a school voucher in the customary way in advance of the activity, with the privilege extended to the director of athletics or his representative to pass out the check to the game official. This plan would seem to meet the wish of game workers and officials to be paid immediately.

Practices Vary Widely

An additional question solicited comments regarding prevailing practices in the school systems represented by the business officials participating in the survey. This brought a variety of responses too diversified to be classified. The comments indicated, however, that the practices vary widely, being in accord in certain areas with those of other school systems and diametrically opposed in others. Nor were the prevailing practices necessarily in agreement with the opinions



The fourth, and a much less involved, question asked:

4. Should payment to game officials be made by the athletic director, or should a general school voucher be issued?

Answers to this query showed a large area of agreement as to the choice between cash or voucher payments to game officials. Nine out of 10 members of the jury (89.7 per cent) declared themselves in favor of the use of vouchers. Certain of the answers, however, ignored reference in the question to a general school voucher. Thus among those declaring themselves in favor of voucher payments were both those voting for autonomous athletic department rec-

expressed by any one respondent in answer to the four previous questions.

Underscored by this survey is the need for greater uniformity in accounting procedures for athletic department funds. Business officials generally have a clear conception of what needs to be done, but it will take a while to reconcile theory with their practice.

Basic to the widespread acceptance of standardized accounting practices for athletic funds is the crystallization of a common educational philosophy as to the role of athletics in a school's curriculum, the relationship to its over-all physical education program, the objectives to be achieved, and the financial limits indicated. ■

How to Coordinate School Lunch With Total Curriculum

E. ALLEN BATEMAN

State Superintendent of Public Instruction, Salt Lake City

AN OLD adage in education, "As is the principal so is the school," might well be paraphrased, "As is the principal so is the school lunch."

We seldom find an excellent school lunch program unless the principal and superintendent are giving it enthusiastic support. We never find a food service program coordinated with the school curriculum unless the administration has actively participated in this coordination. Whenever we ask a school lunch manager to what factors she attributes the success of the program, she invariably lists the support of the school administrator as a major factor.

Within the framework of administrative support are the following important factors:

1. The school lunch supervisor in the district is a professional school employee whose salary is comparable to that of other supervisors, who attends district staff meetings, and who is paid from the general administration funds.

2. The school lunch manager in the individual school is considered to be of professional standing, participates in faculty meetings, is assigned to faculty committees, and is expected to be a student of the overall educational program.

3. These supervisors and managers have the same retirement, sick leave, and vacation privileges as other members of the teaching profession.

4. The principal assigns school lunch problems for faculty discussion and for special faculty committee work just as he does other school curriculum problems.

5. The superintendent and principal invite and encourage every child to participate in school lunch.

6. In junior and senior high schools, the administration requires a closed school.

7. The principal gives the same personal supervision to school lunch activities as he gives to other major school functions.

8. Superintendent and principal are frequently seen eating lunch in the same room with the students.

9. Superintendent and principal frequently "drop in" to greet the school lunch workers. Something is wrong with administrative relationships if the school lunch manager, upon seeing the superintendent enter the kitchen unannounced, reaches for the smelling salts or calls for the rescue squad.

10. The principal and superintendent take definite steps to develop good public and community relationships for lunch program.

11. The state school administration develops certification standards for school lunch supervisors, and probably for managers. It develops state and regional workshops and conferences for upgrading all school lunch personnel. Staff members in other areas of the school curriculum assist in these workshops.

12. State school and local school district curriculum guides contain statements of appropriate objectives and suggested teaching experiences related to the school lunch program.

If most of these characteristics of administrative interest are in evidence in a school system, many of the desirable teacher, pupil and community evidences of interest in school food services will follow in short order almost automatically.

TEACHER RELATIONSHIPS

In a school conscientiously attempting to make food services an integral part of the educational program, there are readily observed evidences of the "team" approach to school lunch problems on the part of teachers. Some of these are as follows:

1. Teachers accept assignments for school lunch supervision in the same spirit as assignments are accepted for other school activities.

2. Teachers are alert to discover applications of the school lunch program to other areas of the curriculum and to correlate the two. An example is the decorating of place mats for elementary school lunch or a committee assignment in history or civics on the typical foods served at school in other countries.

3. Teachers constantly refer to school lunch problems in such terms as, "I believe *we* could do this to improve the school lunch program, rather than say, 'Why don't *they* do this?'"

4. Teachers feel free to discuss lunch problems on a professional basis with the lunchroom manager, the principal, and in school faculty meetings.

Whenever these evidences of teacher attitudes and practices exist in a school, we can be assured that desirable pupil and parent relationships toward the lunch program will also be found in that school.

PUPIL RELATIONSHIPS

Let us consider some of the desirable attitudes and practices that pupils will have in a school that coordinates school food services with its total educational program.

1. Student councils, class officers, and student committees feel a responsibility for successful operation of the school lunch program.

2. Students bring up school lunch problems and proposals for improving the program in their homeroom sessions.

3. Students suggest activities the class could carry out to make the lunch service more attractive.

4. Students take pride in inviting student groups from other schools to participate in the school lunch service.

5. Students assume personal and collective responsibility to keep the atmosphere of the lunchroom one of free, comfortable enjoyment of a good meal in a companionable but dignified way.

6. Students accept some assignments in school lunch service without expecting special pay, especially in the elementary school.

7. Students participate with great interest in birthday ceremonies in connection with the noon meal.

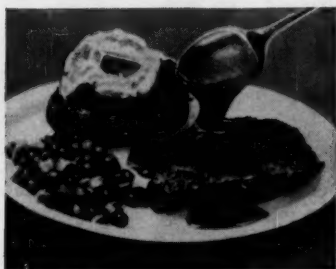
8. Students cooperate by acting as hosts and hostesses at tables.

9. Is it too much to hope that students will encourage their friends to share the pleasures and advantages of a school lunch, that a virtually unanimous participation will be achieved

From a talk given at the National Restaurant Association convention and exposition, Chicago, May 1958.



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through student, rather than faculty or administrative, pressures?

PARENT, COMMUNITY RELATIONSHIPS

School food services are especially adapted to a program of promotion of better relationships between school and community. No area of school activity can appeal so well to parent interest as can the school lunch. Let us consider a few of these possibilities.

1. The school can organize a school lunch advisory committee of parents to assist in promoting better school lunch activities. Such a committee could meet every three months, or

often if desired, holding such meetings at the school.

One school has used such a committee to ask parents of foreign birth to plan and to assist in preparing and serving a noon meal once a month featuring foods characteristic of their native country. Such a committee of parents is the source of many ideas for improving the school lunch. It adds tremendously to public support of this school service.

2. Parents can be invited to attend a school luncheon at which their children are participating in special birthday parties.

3. Mothers can be invited to assist in serving the noon meal in the school cafeteria, taking turns at regular monthly intervals.

4. Service clubs can be invited to hold meetings in the school cafeteria. Occasionally such a group can be served the menu prepared that day for the children.

5. Health, social studies, science, mathematics and other classes can be encouraged occasionally to prepare exhibits portraying the facts of school lunch service and exhibit them in appropriate places on "Main Street." This not only promotes the educational side of the school lunch but has a wholesome effect upon the entire school program. Posters and charts can explain the balanced diet, the number and proportion of students participating, the cost of school lunch and sources of revenue, the amount and value of various community food products used in the school lunch program, and comparison of the local school program with other school lunch services in the state and nation. This type of exhibit requires service from the school art classes.

6. Superintendent and principal can hold many of their "public relations" luncheon meetings at the school rather than downtown. Businessmen or business can thus learn at firsthand what this important school service means to school and community.

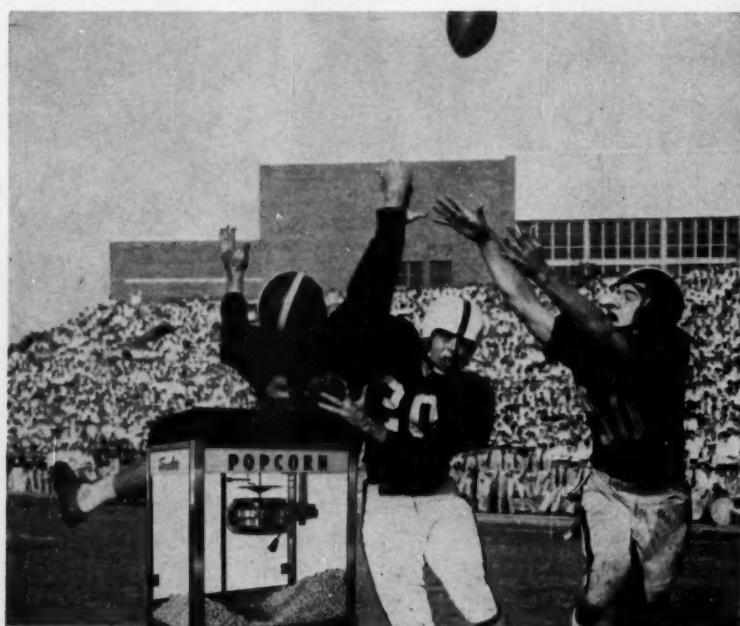
SOME GOOD PROGRAMS

I have mentioned at least 30 specific ways by which school food services can become an integral part of the educational program of the school. The list is by no means exhaustive. As it has recently been my pleasure to observe school lunch programs in several western states, I shall give a few illustrations of good features of school lunch programs I observed.

An elementary school (K-6) in the California Bay Area has 210 pupils. About 65 per cent of these children participate in the noon meal. They come to the lunchroom in small groups to avoid waits. Each teacher accompanies her own group until the children have been through the line. She may then leave if she wants to eat lunch with the other teachers.

Children carry a tray through the serving counter and then move past a table where one pupil places a carton of milk on the tray and another adds a straw and a paper napkin. Pupils take these serving assignments for a week at a time and receive no compensation.

Pupils proceed to an assigned table where a student hostess is standing behind a chair at the head of the table. All children remain standing



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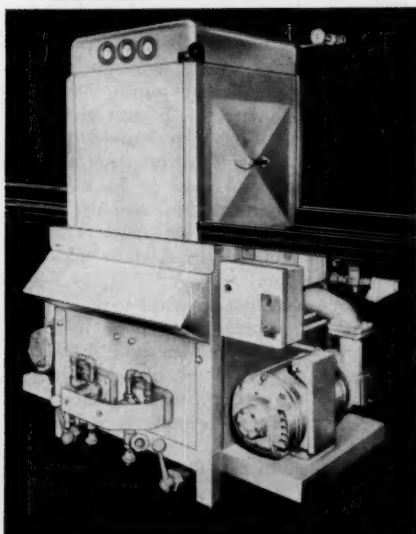
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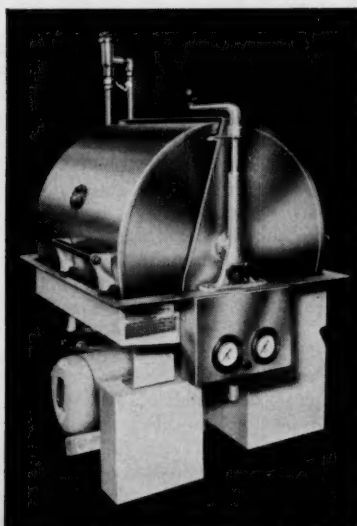
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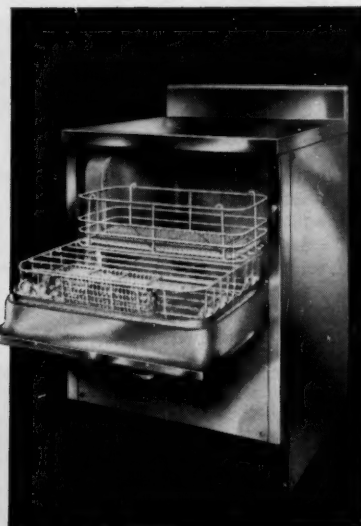
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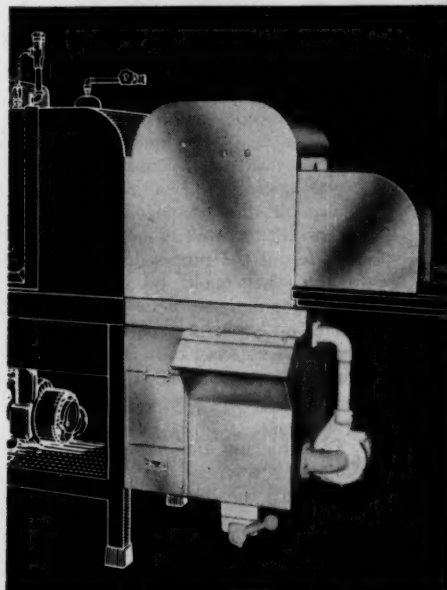
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until the table is filled. The hostess assists any child who is having difficulty finding a place. The children sit and begin their meal when the hostess is seated.

All children remain at the table for at least 20 minutes and until the hostess rises to leave. There is ample time to eat and no one need be in a hurry since all must remain at the table until excused. As the plates are returned to the dish return counter, two boys, taking their turn in filling a school assignment, scrape the plates.

A special feature of this school lunch service is the presence of two parents behind the serving counter each day. They volunteer through the school parents association, and each mother comes once a month on a designated calendar day. These mothers arrive at 11 a.m., prepare salad or perform other duties, assist in serving, and help wash dishes. Each mother serves only eight or nine times a year, which makes a total of 60 mothers who give this service. School personnel and parents both seem to be enthusiastic about the benefits of this type of parental service.

A senior high school group in Colorado recently moved into a new building with a fine lunchroom (multipurpose) and kitchen. Eleven hundred pupils are enrolled. Lunch periods are staggered from 11:15 to 12:15, a few classes coming in every five minutes. The only lunch served is the single plate lunch with an opportunity to buy extras of milk and one or two desserts. The single plate lunch costs 30 cents. From 800 to 900 students eat the school lunch each day, approximately 80 per cent of the student body.

EXCELLENT DISCIPLINE

Order in the lunchroom is excellent. The only teachers I saw were the assistant principal and the dean of girls, who take the school lunch as one of the major school assignments. Students working in the cafeteria are reimbursed with a lunch and a small hourly fee. The school does not sell candy or soft drinks. In fact, the state school lunch department does not distribute federal funds to a school that serves à la carte meals in addition to Type A single plate meals.

School C is a small ungraded elementary school, also in Colorado, the Pear Park Elementary School in Grand Junction. This is a school of 95 pupils covering the first three years of work. There are no grades, only reading levels, but that is another story. The economic background of the pupils generally is below average.

Lunch is served to all children at once. Pupils find their single plate

meal on the table when they arrive. There are three large tables, a teacher seated at the head of each, with a pupil hostess at her left. Pupils recite a simple prayer together before eating. They watch the hostess to begin.

As soon as several pupils have cleaned their plates, the hostess gives permission for those who desire to go back for seconds. Extra helpings are small, but a pupil may go back as many times as he desires, so long as he eats all that is on his plate. The principal says the record is seven helpings to one boy.

In our attempts to emphasize the educational aspects of school food services, we must not lose sight of the primary purpose of school lunch—to serve an appetizing, well balanced meal, in pleasant surroundings at low cost.

Of course that is really an educational objective just as is the goal of developing good readers. What we want is to have this school lunch program serve more than one objective. Next to the good health of school children, the most important objective is to have school lunch act as a catalyst for better learning in all areas.

SPEAK SAME LANGUAGE

Because our National School Lunch Act was not initiated with an educational objective in mind, efforts to date have been largely concentrated on nutrition. We must develop other educational objectives. To do so, all of us must work together. We must learn to speak the same language in the school lunch program.

A principal recently advanced the idea of serving some of the lunch family style. The lunch manager's reaction was that it couldn't be done; it was against the health regulations. She sought the assistance of the health authorities to prevent anything being done about the proposal, rather than to see what could be done within health regulations. School lunch personnel and teaching personnel, each must avoid giving only lip service to educational objectives, and must work together to find ways of reaching desired goals.

In achieving the purpose of coordinating the school food services program with the school curriculum, we are on our way. We have not yet arrived; indeed, we have made only a fair beginning. Superintendents, principals, school lunch workers, and teachers must move forward as a team of professional educators, interested only in the welfare of the child, to see that this "big business" of school food services actually does become an integral part of our educational program for the children of America. ■

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Challenging Public Education

An Analysis of Roger A. Freeman's "School Needs in the Decade Ahead"

POST-SPUTNIK insecurity has triggered bold expressions of opposition to American public education from people who have long disagreed with its generally accepted ideals and purposes.

Extremists say that education should be a private matter and that public education is socialistic. Other critics approve of general education through the high school at public expense for only an academic elite. Many regard general secondary education for all youths according to their respective capacities and needs as too expensive. These groups and others will welcome a book published recently that argues for restriction of public education by curtailing its financial support. I refer to Roger A. Freeman's "School Needs in the Decade Ahead."¹

Evaluation of this book must be made clearly in view of the basic attitudes of its author and sponsors and their assumptions about the public schools.

Attitudes. The brilliant and personable author, Roger A. Freeman, is vice president of the Institute for Social Science Research established in Washington, D.C., in 1956. He came from Austria in 1940 and was employed by shoe manufacturing concerns until 1950. Then he became an assistant to former Gov. Arthur B. Langlie of Washington. His work there and in the educational task force of the Commission on Intergovernmental Relations defined his belief that American schools cost too much.

Two of the four trustees of the Institute are officers of the association that published Freeman's argument against national support of education in 1955.² Another directed the studies of the Commission on Intergovernmental Relations. The fourth is a retired college president.

The Relm Foundation finances the Institute. It has an office in Ann Arbor next to its parent, Earhart Foundation, and is apparently named after the initials of Richard Earhart and the late Loren Miller. The latter was the vice president of the Earhart Foundation, which supports principally conservative causes. The Relm Foundation's policies are similar to those of the William Volker Fund, which supports Merwin K. Hart's National Economic Council and, with the Relm Foundation, the Bestor-inspired Council for Basic Education.

Assumptions. Freeman presents his basic assumptions at the outset in a "Preview and Summary" entitled "What Price — Education?" He uses brief quotations from various critics to create reader acceptance of these assumptions throughout the book, usually without pretense of research. Quotations tending to disagree with the assumptions are used in their weakest forms, with innuendos that strengthen the assumptions themselves. Let us illustrate.

Comparisons Unfair

1. "Why are graduates of our schools two or three years behind the European and Russian counterparts?" Freeman asks this "wife beating" question on the first page of his "Preview." Three pages later he admits that American schools enroll a much larger percentage of the young people 15 to 18 years old than any other country, keep them in school longer, and teach subjects not taught elsewhere. Then he asserts: "But the children learn less, in terms of academic achievement, in American schools in 12 years than they do in Russian or other foreign schools in 10."

European academic students should be compared only with American honor groups in academic or other achievements, since they represent about the same proportion of their respective age groups. A majority of

American students receive general education through high school or college during the years their European counterparts are in vocational schools or at work. American and European purposes in education are not alike, and each system should be judged in terms of its own purposes. Freeman judges American schools in terms of European purposes.

Opinions Only

2. "The watering down of the curriculum and the erosion of standards . . . are responsible for the absolute and relative decline in the educational level of our youth."

This assumption is said to be held by Freeman's Good Guys — college and university presidents and faculty members, scientists, engineers and businessmen. His Bad Guys are schoolmen and allied groups who "deny" this. He says the latter insist "that the schools are prevented from raising educational standards even higher only by a lack of money." There is nothing beyond isolated quotations of opinion to uphold the assumption, and not even a quotation to show that any of Freeman's Bad Guys has said that "only" a lack of money prevents improvements in education.

Freeman recognizes one "large group" of moderates who believe the schools have done an admirable job in catering to the needs of the less-gifted, but "have failed to challenge and develop the talents of the upper third or fourth of their students." This leaves the erroneous impression that this "large group," which believes more money is needed, is composed of people responsible for the "watering down" and the "erosion" Freeman assumes.

Nevertheless, the author adds to his Good Guys until they become "the American people [who] have loyally and faithfully supported their schools." About Bad Guys like William G. Carr, who wrote, "We could make rapid and substantial improvements in the qual-

¹ Washington, D.C.: Institute for Social Science Research, 1956. Pp. 273. \$5.

² American Enterprise Association: Federal Aid to Education — Boon or Bane? Washington, D.C.

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ity of our schools right now if we had the financial resources to do as well as we already know how to do," Freeman uses loaded words, such as: "These and similar charges present a grave accusation against the American people: That they have been and are starving the schools while lavishing the abundance of their material prosperity upon personal consumption." This is propaganda, not research.

Accuracy. When I asked for a review copy of his book, the author graciously offered to confer on "factual" questions. Jean Flanigan of the N.E.A. Research Division joined us. After Mr. Freeman had explained his methods for several hours, it became apparent that the following examples illustrate how he reaches his conclusions.

Facts Concealed

1. Table 1, comparing expenditures at all levels of government for education and for all other purposes for 1952 and 1956, uses a large decline in cost of national defense to conceal *increased* expenditures in public services fairly comparable with expenditures in education. *Highway costs increased faster than those for education* in these years, for instance, but the contrary impression is inevitable from Table 1 and its accompanying Chart 2.

Point Not Proved

2. Freeman calls "fallacious" the fact that federal matching grants for public services such as highways and welfare place general elementary and secondary education at a disadvantage in competition for state funds. He told us there is no disadvantage in regard to highways because state matching funds are often supplied from earmarked taxes. In his book he merely compares educational and other public expenditures for 1902 and for 1956 and concludes that, since the former increased "roughly 50 per cent" faster (the true percentage is 42.6 per cent, according to Table 9), federal matching funds must have had no effect. This proves nothing of the kind. Without federal financial incentives discriminating against education the increase in education undoubtedly would have been greater.

Realistically, we know that many states operate more or less as a state

budget director explained recently: "Our whole fiscal program is geared to federal funds. We've increased our public welfare expenditures almost 60 per cent, but the federal government will more than match every additional dollar we put up. And when we expanded our educational facilities, much of it went to vocational rehabilitation or the agricultural extension service, where federal funds are also available."³

Teachers Paid Less

3. The author counts *all members of the military services* in comparing salaries of teachers and federal employees for 1929 and 1956. The respective salaries for teachers are given as \$1400 for 1929 and \$4207 for 1956 and for federal employees as \$1561 and \$3927, in Table 10. If the author had used the correct statistical data, comparing teachers with "civilian employees of the federal government," as he claims on page 17 he has done, the respective salaries for teachers would have been \$1400 and \$4207 and for federal civilian employees \$1933 and \$4804. Omitting the soldiers, sailors and other military personnel, as the N.E.A. Research Division has properly done in similar tables which Freeman has used in part, *reverses* the relative salary positions of teachers and federal civilian employees.

Classes Are Larger

4. "The teacher-pupil ratio has been declining consistently," Freeman states in his "Preview and Summary." He purports to prove this by comparing increases in enrollment and instructional staff from 1947-48 to 1956-57. This shows a decline in the teacher-pupil ratio of 1:26.8 to 1:25.3 for the period. The method is clever, because it fails to take into account the large relative increase in secondary enrollment, where the teacher-pupil ratio is lower.

Properly separated, and using N.E.A. data for classroom teachers which measure the exact teacher-pupil ratio, the elementary ratio declined only from 1:30.6 to 1:30.5 while the secondary ratio increased from 1:20 to 1:21.1 during the period from 1949-50 to 1956-57. The two years' difference

in period covered does not alter the result. Freeman bases much of his argument that the schools have enough money on the supposed decreasing size of classes. The fact is that classes were 1.1 pupils *larger* in secondary schools and only 0.1 pupils smaller in elementary schools per classroom teacher in 1956-57 than in 1949-50.

Wages Are Higher

5. We asked the author about Table 33, comparing weekly wages in manufacturing with annual teachers' pay from 1909 to 1957. His index for the increase in manufacturing is 837 and for that in teaching 959. He ignored three factors: (a) The weekly hours worked in manufacturing declined from 51 to 39.8 during the period. (b) Classroom teachers pay in 1909 is not comparable with the salaries of the total instructional staff in 1957. (c) The length of the school term increased more than 13 per cent. Considering these factors, the index of increase in manufacturing wages is 1072.5 and that for teaching 765.5. Freeman's conclusions are *reversed* when these more realistic and valid bases are used in the computations. The principles involved apply throughout the book.

Ignores Mobility

6. Need for construction of school facilities is thoroughly confused by inaccuracies long before the author concludes that local and state surveys are necessarily subjective and inaccurate. Then he makes his own computations of need up to 1970, omitting the factor of population mobility, which increases need at least 10,000 instructional rooms each year.

Platform. Mr. Freeman supports large classes, double sessions, the four-quarter school year, less school building space per pupil, television to save money, and other panaceas, without valid research.

At luncheon with Mr. Freeman after our conference, he mentioned that another friend had said his book might encourage the lunatic fringe critics. We believe it will. Meanwhile, those who follow Freeman and his sponsors in their thinking are already having a heyday quoting from his book. ■

³ The Reporter, July 10, 1958, p. 22.

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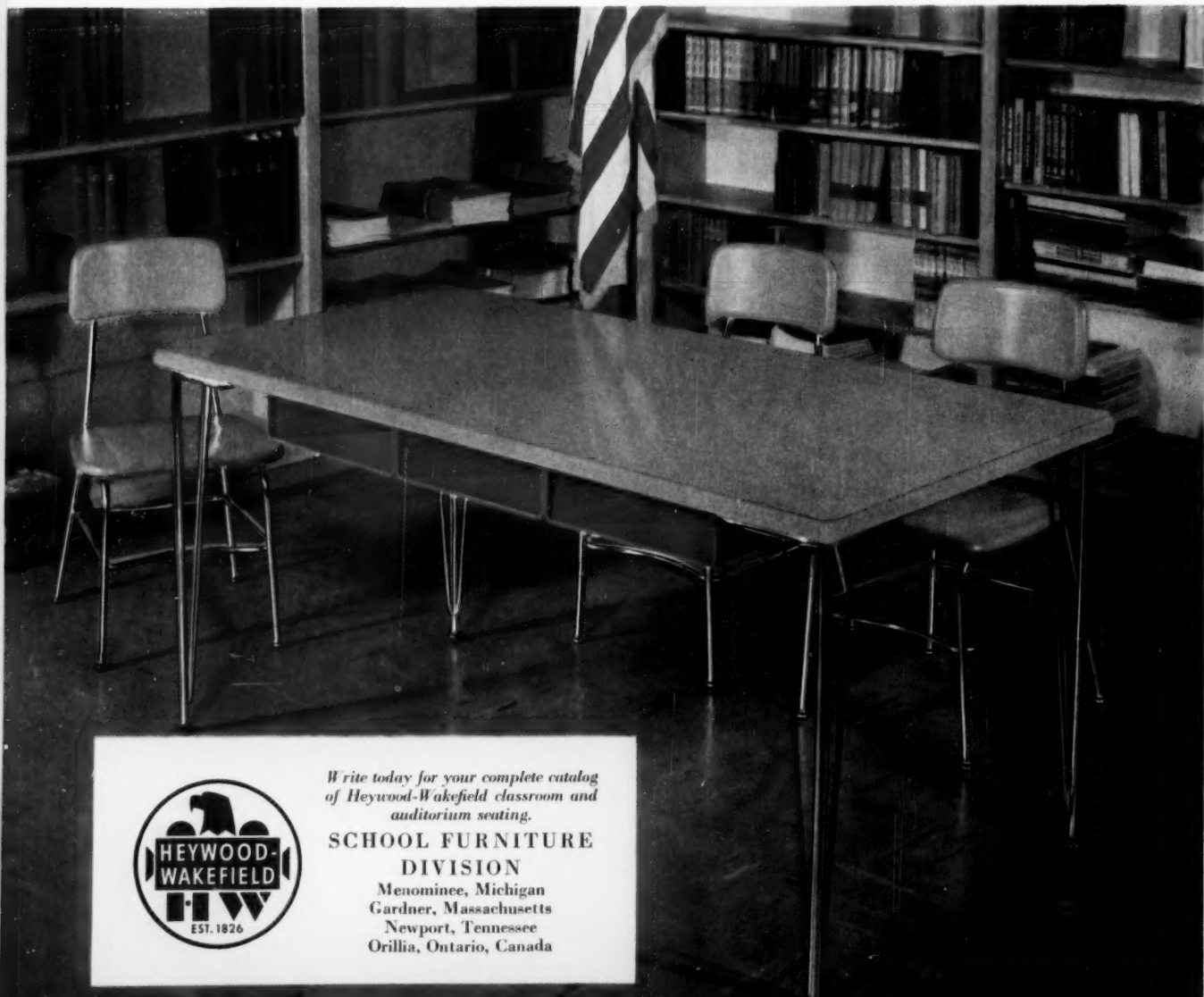
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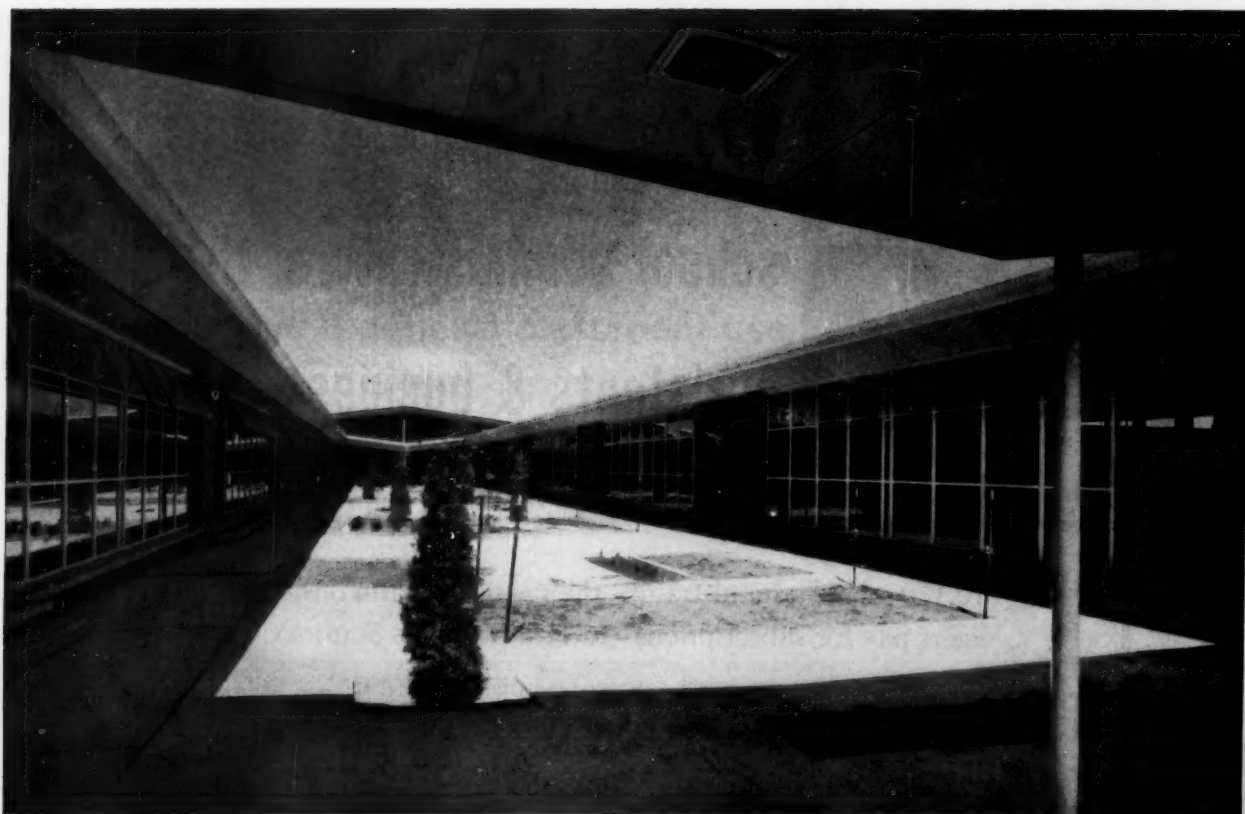
business interests of the professional educational and business leaders of American public school education, today, as it has since its founding in 1928.

*Based on an analysis of paid circulation of the November 1957 issue, the latest for which figures are available.

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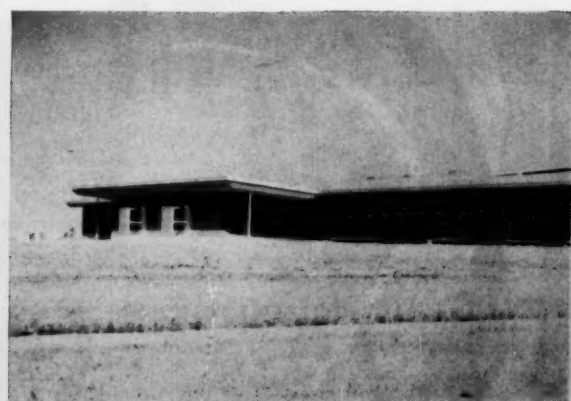
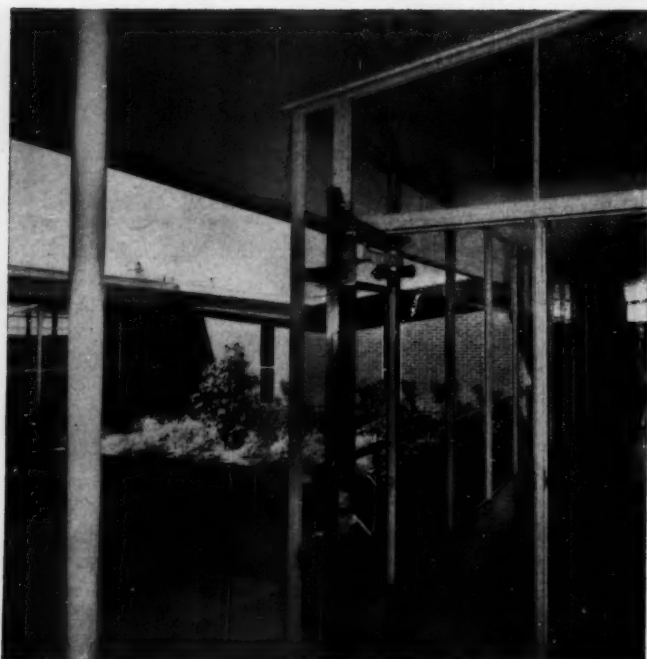
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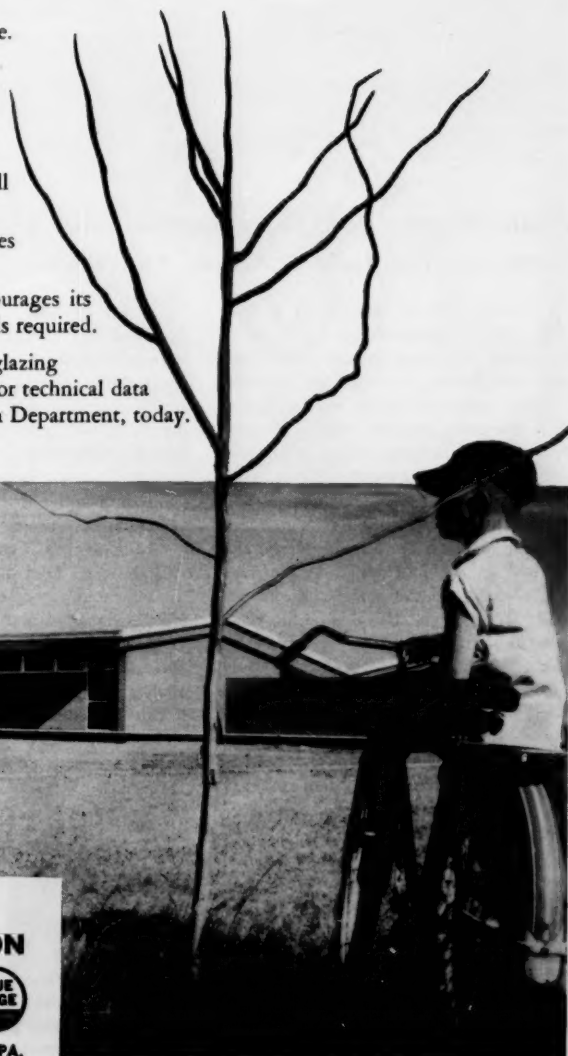
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WSW 7288

NEWS IN REVIEW

Integrating School, City Plans, N.C.S.C. Convention Topic

SEATTLE. — A new ingredient is being added to this year's convention program of the National Council on Schoolhouse Construction, meeting here September 23 to 26. It is city planning, and the coordination of long-range schoolhouse planning and comprehensive city planning will be the meeting's central theme.

Speakers are to include A. Rossilini, governor of Washington; Clyde Campbell, Seattle superintendent of schools, and two professional city planners. George Brain, superintendent at Bellevue, Wash., will tell the Bellevue story, and Carl Jensen, superintendent at Highline, will discuss growth problems in suburbia and attempts being made to cope with them.

Unfinished business from last year's convention includes committee reports on the publication of a brochure on ele-

mentary school planning, a study of post-secondary school and university activities, and pamphlets on the purchase and maintenance of equipment.

Harold Silverthorn, president, and other officials of the N.C.S.C. will preside at the various sessions. Mr. Silverthorn is director of buildings and properties for public schools of Gary, Ind.

U. S. Chamber of Commerce Opposes Murray-Metcalf Bill

WASHINGTON, D.C. — The U.S. Chamber of Commerce has put itself positively on record against the Murray-Metcalf bill (S. 3311) to provide federal aid to states for public school construction and payment of teacher salaries, in testimony before the Senate subcommittee on education. Edgar Dessen of the U.S. Chamber's education committee declared that the proposed federal aid for school construction is "neither necessary nor desirable," and would have consequences "of great detriment to America's future."

Audio-Visuals Can Solve Instructional Lag, Commentator Tells N.A.V.A. Convention

AUDIO-VISUAL methods of instruction are smack-dab in the center of the great American educational crisis," said Alex Dreier, news analyst, addressing the American public over a nationwide television program Sunday evening, July 27. The program was a nationwide salute to the 18th annual national audio-visual convention and exhibit meeting in Chicago, held July 26 to 29.

With so much more to be taught and learned in schools and colleges today, audio-visual technics come to the rescue, said Mr. Dreier, because audio-visual education "speeds up the absorption rate of the learner."

He recalled how, at the beginning of World War II, the nation was faced with the problem of educating a vastly increased number of military personnel, and successfully employed A-V tools to accelerate the training of those millions of men. And industry is using the same tools to produce the artisans and technicians necessary to meet postwar demands in industrial production.

"And so today," he said, "as we face the prospect of too few teachers and too few schools, modern education turns to audio-visual technics. These reliable tools can retrace history; slow down or speed up natural phenomena; send us snooping into the secrets of Nature and the complexities of business and industry, without leaving classroom or living room.

"Within the last 10 short years, 400,000 new 16 millimeter projectors have been put into use; 38 new school-owned radio stations have begun broadcasting; 11,000 instructional films have been produced; 20,000 new audio-visual directors and coordinators positions have been established, and at least a 100 per cent advancement in the field of educational television has been noted.

"Audio-visuals," concluded Commentator Dreier, "hold the promise of a better educated tomorrow, a tomorrow in which education may be our key to survival, but first there must be public understanding of what the audio-visual specialists can do, have done, and are trying to do throughout the field of education."

Somewhat the same vision and determination was expressed by the newly



P. H. Jaffarian

elect president of the National Audio-Visual Association, P. H. Jaffarian of Seattle. Said he: "As we analyze the differences which exist between the many cultural and social groups with whom we live today, it seems increasingly apparent that most of these differences are due to inadequately arranged educational experiences. Today, (Continued on Page 86)

Workshop Told of Plans for Business Officials Fraternity

PHILADELPHIA. — Organization of an honorary graduate fraternity for men and women in school business administration was one of the proposals made at the second international workshop of school business officials, held here July 21 to 25.

The workshop was again sponsored jointly by the school of education and the Wharton School of Finance and Commerce of the University of Pennsylvania and the Association of School Business Officials of the U.S. and Canada.

Plans for the new fraternity, Sigma Beta Omicron, have not been formalized. Charles W. Foster, A.S.B.O. executive secretary, suggested that the organization date be Jan. 1, 1959, with the first international elections to be held during A.S.B.O.'s golden anniversary convention in 1960. Thereafter the fraternity would convene yearly at A.S.B.O. meetings.

Proposed major projects of Sigma Beta Omicron include an annual research award on a competitive basis and an annual professional lecture to be given at the annual A.S.B.O. convention. Special research publications could supplement the work of the various A.S.B.O. research committees. Organization details would be worked out by the 1958 A.S.B.O. university contacts committee.

Better Use of Teachers Studied Under Ford Grants

NEW YORK. — A total of \$1,217,200 will be given by the Ford Foundation for experiments on the more effective use of public school teachers in the United States. They are:

A grant of \$112,000 to Goddard College, Plainfield, Vt., for an experiment by several colleges and school systems in Maine and Vermont in using college students as classroom assistants and in improving science and mathematics teaching in Vermont's rural areas.

A grant of \$350,000 to New York University to help finance experimental reorganization of classwork in the schools of two New York City suburbs — Long Beach and Ossining.

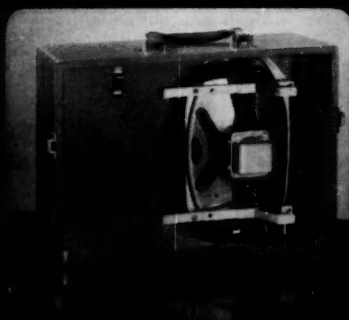
A grant of \$350,000 to the National Association of Secondary-School Principals for experiments in various school systems in California, Colorado, Illinois, Indiana, Massachusetts, Minnesota, Texas and Utah.

A grant of \$140,000 to Yale University for the recruiting and preparing of liberal arts students for public school teaching through a new Master of Arts in Teaching program.

YOUR GUIDE TO THE NEW, LOW-PRICED KODAK PAGEANT 16mm Sound Projector, Model AV-085



2



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8

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- 3. Full range sound**—A speaker must be baffled to make the low tones fully audible throughout the room. The Pageant's NEW, compact 11 x 6-inch oval is baffled in an attractive case that forms the cover for your projector.
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- 5. Rugged and compact**—Printed circuits in the new 8-watt

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- 6. Fidelity control**—This feature is important because a sound track can be on *either* side of a film. Only with a focusing control like the one on the new Pageant can you get the optimum sound, *no matter* which side the track is on.
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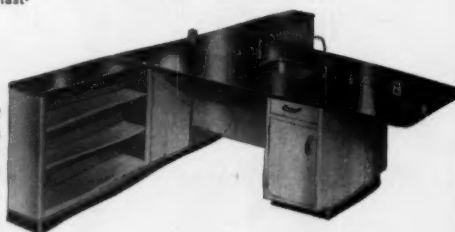
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Audio-Visuals Can Solve Instructional Lag

(Continued From Page 84)

however, the world of people, places and things can be brought into the classroom of every American child through the means of audio-visual materials, equipment and facilities."

The new president is a former minister, having served churches in three states for 25 years. He succeeds in the presidency William W. Birchfield of Montgomery, Ala., who now becomes chairman of the board of directors.

A former superintendent and principal, W.G. Kirtley of Louisville, Ky., was named first vice president.

School purchases of A-V equipment and services and materials will nearly treble in the next 10 years, another speaker declared. Quoting several surveys, Joseph R. Allendorf of Eastman Kodak Co. predicted that school purchases of A-V equipment for instructional purposes will increase from \$257 million to \$427 million in the next decade.

Sets Up Clearinghouse On Teaching the Gifted

WASHINGTON, D.C. — A consultant and clearinghouse service on education of the academically talented has been established recently by the National Education Association. Charles E. Bish, former principal of McKinley High School here, is the new director. The new service, a three-year project, will be administered by the N.E.A. through a grant from the Carnegie Corporation.

Report Says TV Instruction Still Disputed by Educators

CHICAGO. — Television as a teacher is still disputed by educators, a six-member television committee of the North Central Association of Colleges and Secondary Schools concluded recently at a meeting in the Palmer House here.

Donald C. Emery, dean of the college of adult education, University of Omaha, and chairman of the committee, said the conclusion was based on surveys made since the committee was set up in 1953.

"Students can, and do, learn well when instructed by television," Wanda B. Mitchell, director of the Evanston Township High School television project, Evanston, Ill., and one of the committee members, said in her report.

Other findings showed that adults give a high acceptance to television courses; college students tend to be neutral or show a slight preference for television; grade school pupils readily accept it, and secondary school students show some resistance toward it.

Miss Mitchell said instructional television puts more emphasis on the learner. The report will be issued to members of the association.

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Vol. 62, No. 3, September 1958

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87

Change Emphasis in School Public Relations, N.S.P.R.A. Seminar Told; 25th Anniversary Planned

DETROIT. — In many different ways by as many different speakers, a changing role for school public relations was pointed out at the fifth annual National School Public Relations Association Seminar. This role was best expressed in the statement that the primary emphasis of school public relations in the next decade should be helping the public to understand and appreciate the underlying purposes and values of education in America.

With this challenge, the 120 members attending the one-week seminar (July 6 to 10) in Detroit set out to do as the seminar theme said, "Rethink the Fundamentals of School Public Relations," in the light of current issues in education.

Job titles of the participants varied from assistant superintendent in charge of special services and director of public relations to school-community relations coordinator and editor of publications. The key to each person attending, re-

gardless of the title, was that he or she is responsible for a school district's or a teacher association's public relations program.

In addition, 24 school superintendents from small districts, where size makes it difficult to have a full-time public relations person, attended by invitation.

Big-city public relations programs were well represented with 23 persons from cities of more than 750,000.

Overwhelming agreements were reached that the two areas that will require major work with the community during the next year are finance — not just the funds to take care of the increasing enrollments, but funds to maintain the present quality of instruction — and curriculum, particularly citizen interest and participation in curriculum development as the basic philosophy and objectives of the schools are re-evaluated and restated.

The N. S. P. R. A. president, Sylvia Ciernick, editor of publications for the Dearborn, Mich., schools, told the group that two major influences will affect the kind of public relations job to be done. The first influence is the fact that schools are no longer islands unto themselves. The age of comparison, brought about largely by mass media, is upon every school district as parents ask, "How do we stack up?" The second influence is the high public interest in education, which is here to stay, especially in the areas of curriculum and finance.

Miss Ciernick explained that schools will need to meet the demand for comparison through planned programs which relate the great amount of nationally released information to the conditions at the local scene, and by acting increasingly more as translators between the community and the school program.

Charles F. Moore, vice president in charge of public relations for the Ford Motor Company, told the group that it is true that nearly everyone fancies that he knows the business of education better than the educator. What is more significant is that nearly everybody is talking about education. That fact offers a great challenge and a great opportunity. The great single interest in education can become a mighty groundswell of support if the schools indicate they know where they are going and what they need to arrive there. People want leadership in educational matters and they want to know where they are being led. It would seem then that one of the first functions of a school system is to determine its objectives and set up a platform announcing these objectives.

"One of your first professional responsibilities is to be a kind of gadfly goading the educators with whom you work into assuming the leadership they should exercise. Before you go to the public, you

(Continued on Page 92)

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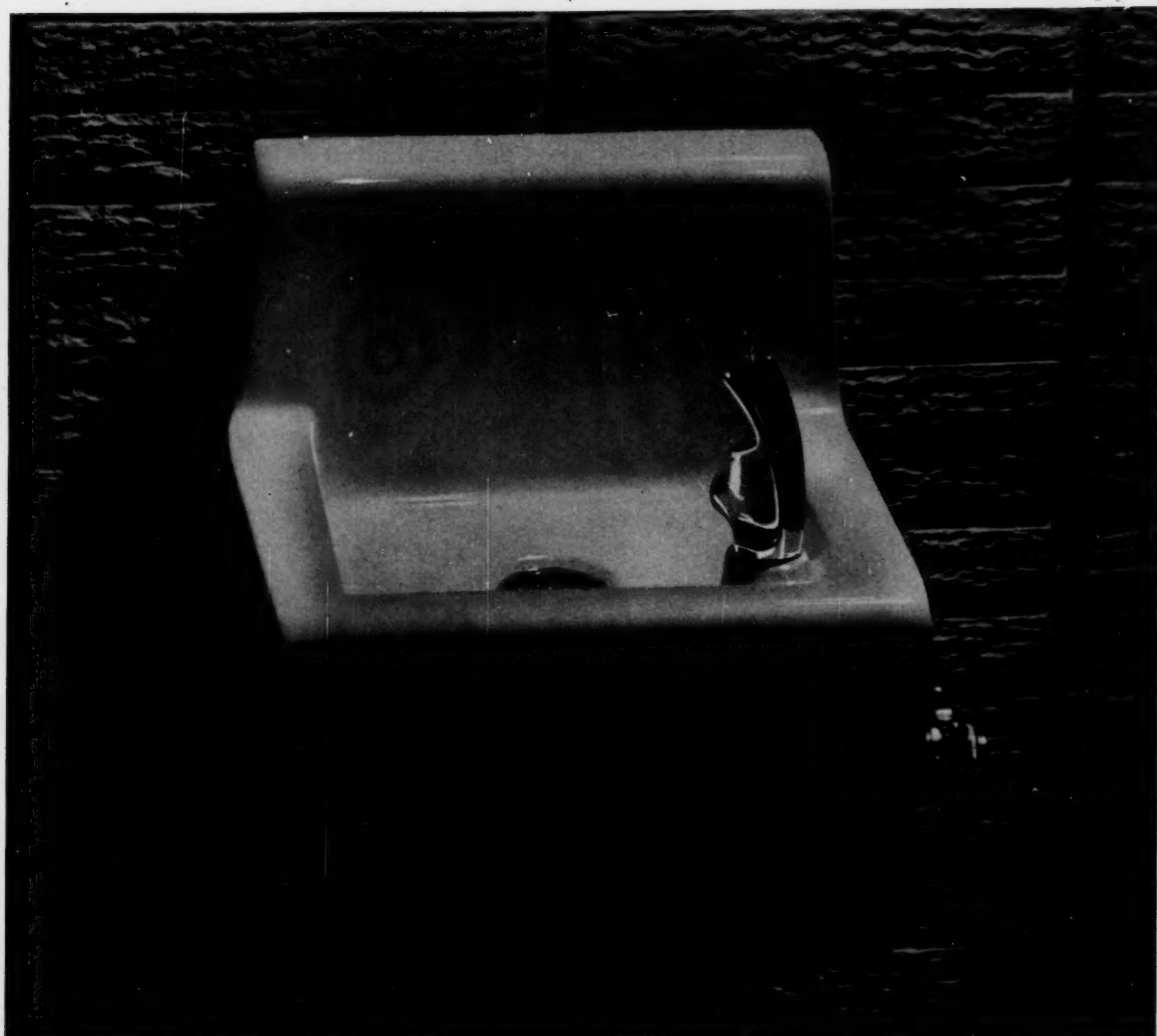
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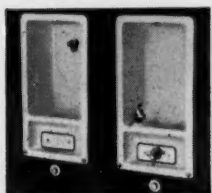
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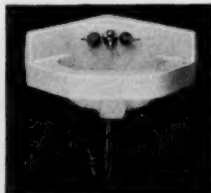
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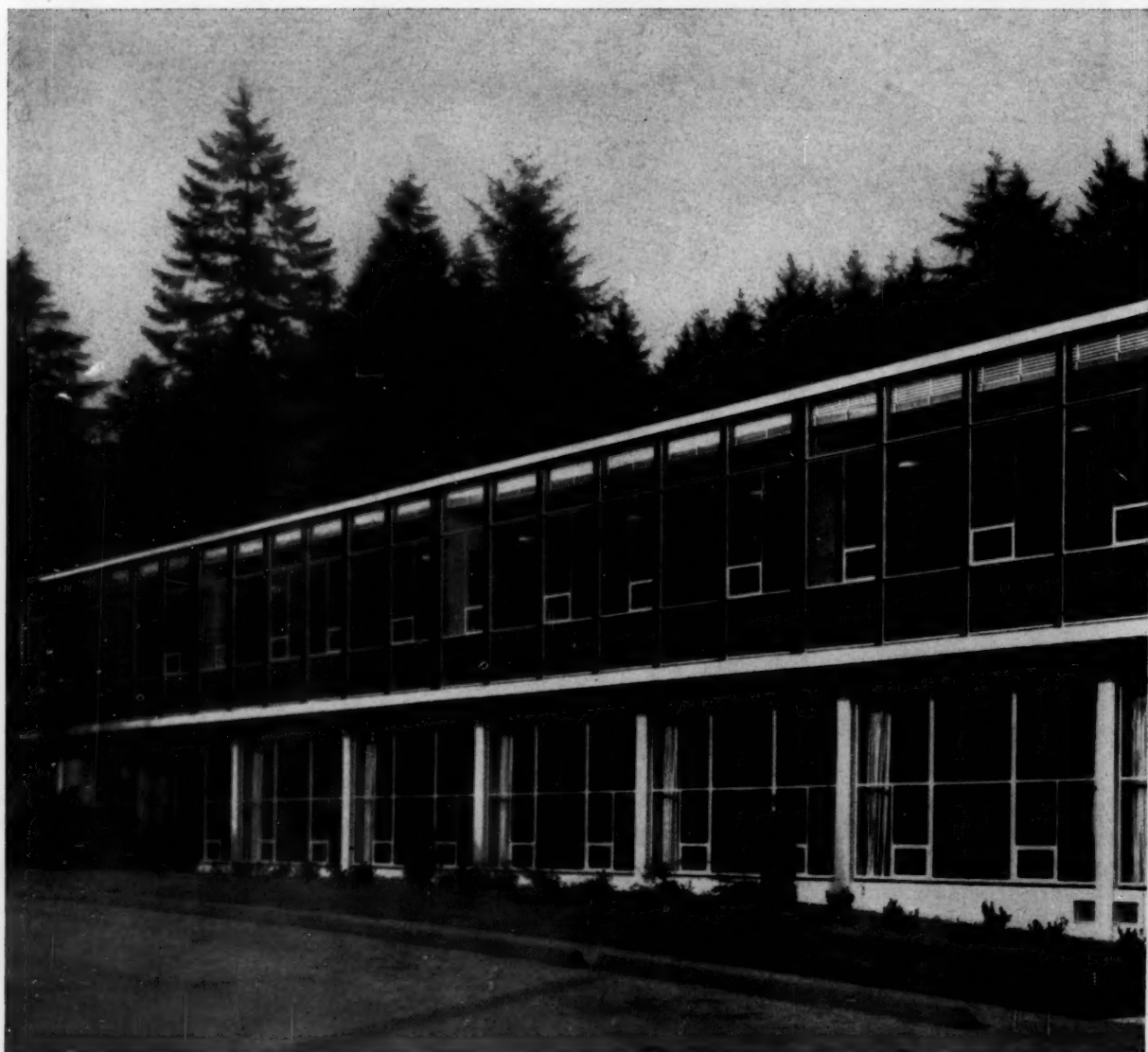
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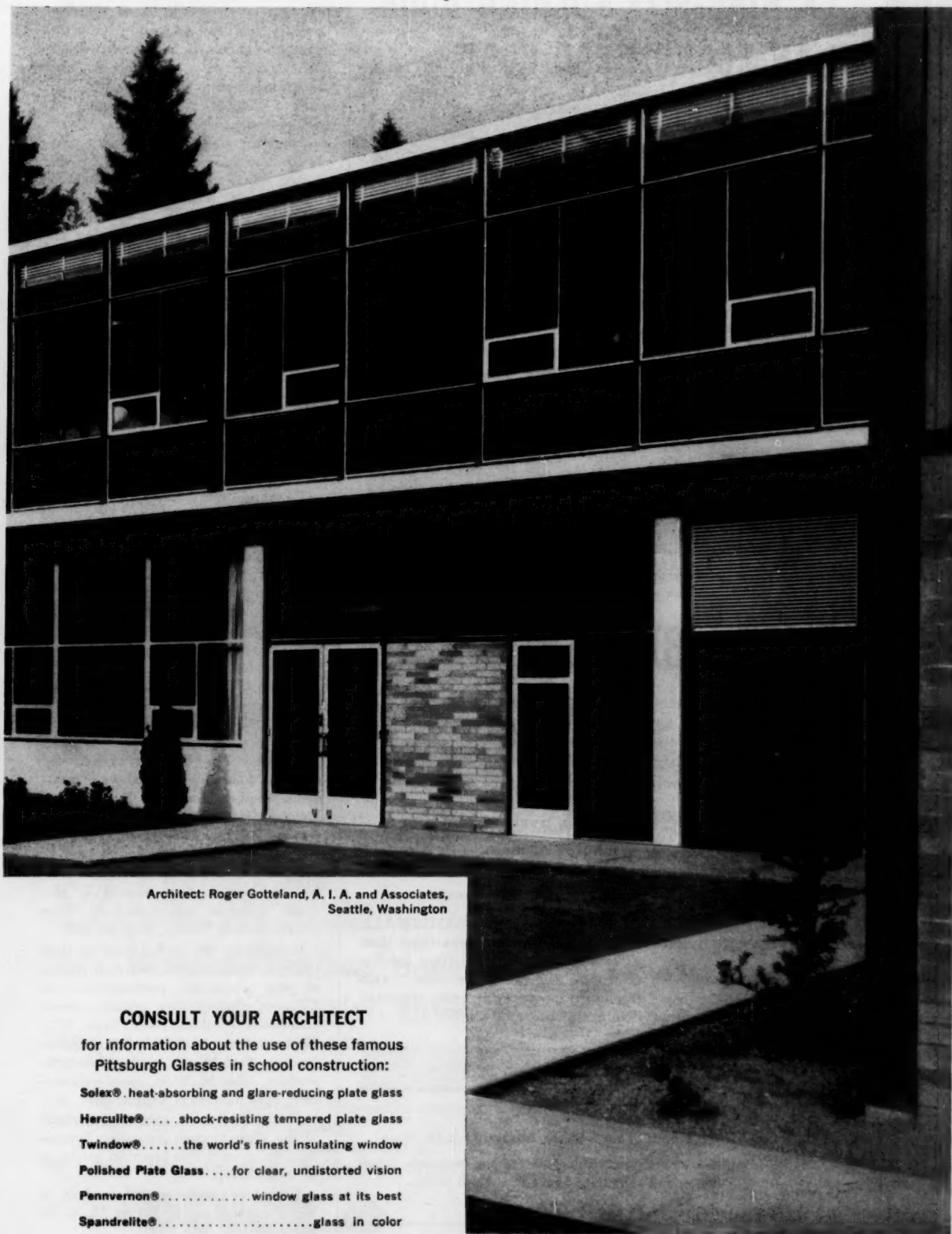
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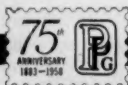
Architect: Roger Gotteland, A. I. A. and Associates,
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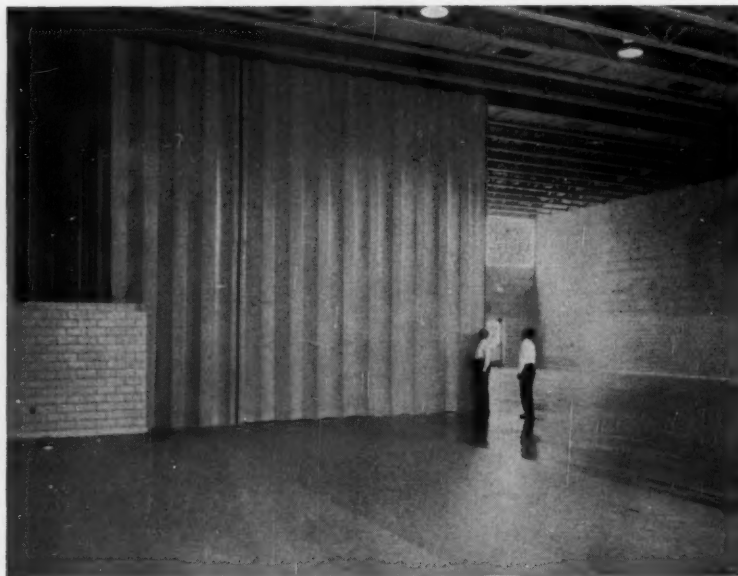


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are the public. You ask the questions that mothers will ask about teaching methods. You insist on sound reasons for adopting a philosophy, as fathers will insist. You're a two-way channel of communication, not a one-way valve. You aren't a publicist. You're a professional with professional responsibilities. As you discharge them well, you will assist your associates to make the most effective use of their talents in solving what has been called our educational crisis," Mr. Moore said.

At the first day's meeting Arthur H. Rice, editor of *The Nation's Schools*, in discussing the topic "The Soul of Public Relations," urged that school public relations concentrate more intently on helping citizens and pupils understand the goals of the total educational program, with less attention to explaining the methods of teaching. He called for less defense of the status quo and much more effort to picture the kind of education that is possible and within reach if people really want it. Teaching the school within the school, he said, is an opportunity and a responsibility.

At the annual meeting, by-laws were adopted giving official encouragement to the establishing of local chapters of N.S.P.R.A. by any group of 10 members. This change reflects the growth of the association since its organization 23 years ago with 23 members. Today it has more than 1800 members in the United States and Canada.

Reelected to office at the annual meeting for second terms are president, Sylvia Ciernick; first vice president, Clayton E. Rose, director of public relations, New York State Teachers Association, and the following regional vice presidents: **southeastern**, John E. Windrow, director of Division of Public Services, George Peabody College for Teachers, Nashville, Tenn.; **south central**, Don E. Matthews, assistant superintendent, Dallas, and **northwestern**, Harold V. McAbbe, assistant superintendent, Lane County School District, Eugene, Ore.

Completing the second year of their two-year terms are the following regional vice presidents: **northeastern**, Lee Demeter, administrative assistant, school-community relations, Great Neck, N.Y.; **north central**, A. T. Lindley, superintendent, Fort Wayne, Ind., and **southwestern**, Allan M. West, executive secretary, Utah Education Association.

Phares E. Reeder, executive secretary of the West Virginia Education Association, was named vice president in charge of membership.

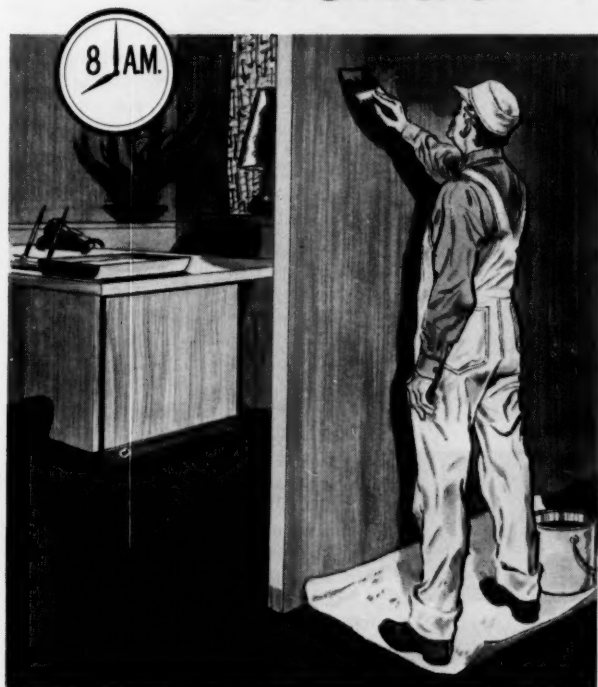
Next year's seminar will be held in Washington, D.C., July 6 to 10, at the Statler Hotel.

Plans were started at postseminar meetings to make arrangements for celebrating the association's 25th anniversary in 1961.

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Principals Association Urges "Stepped Up" Curriculum Sequences for Science, Mathematics Teaching

WASHINGTON, D. C. — Within four months, almost to the day, of its annual convention, the National Association of Secondary-School Principals came up with the delegate-directed revision of its "position paper" on the teaching of science and mathematics. Less imperative in tone than the original document, the recommendations in their present form perhaps can be accepted as a guide by more average size school systems.

"Our executive committee believes that this association should 'call the shots' for

secondary education," Delmas F. Miller told the convention delegates in February. The chairman of the 18 man committee on curriculum planning and development then presented to the assembly a preliminary draft of a statement titled "The Place of Science and Mathematics in the Comprehensive Secondary School Program."

During the following two days some 1500 members, grouped in study panels of 15 men each, studied the recommendations. There was general agreement on

the basic suggestions, but some members expressed concern lest the language of the recommendations appear too categorical. They believed that the program should be "strongly recommended," rather than "required." Closely allied was the repeatedly expressed desire to have emphasized in the credo the importance of more and better counseling on individual needs, rather than on courses. Some questions were raised on whether certain recommendations were too idealistic to be applied by the average school system in a practical manner.

The revised statement, approved by the executive committee on June 10, has lost some of its fervor and excitement. In keeping with member suggestions, its tone has been softened. Aside from semantic refinements, the revised "statement of beliefs" concerning science and mathematics teaching supports the study of these subjects during the junior high school years by all competent to do so, with pupils proceeding in keeping with their abilities in these fields. For the more apt students it suggests "moving down" subjects by one year, so that by the time they reach the twelfth grade they can devote their attention to college level subjects.

At the junior college level, the N.A.S.S.P. recommendations are:

1. All "normal" pupils in Grades 7, 8 and 9 are to be encouraged to study some form of mathematics and science in each grade.

2. While the amount of time given to these subjects in each grade may be flexible, at least three hours a week is suggested.

3. While all pupils cannot be expected to proceed at the same rate, they should be challenged to accomplish as much as they can. Since the most capable pupils can complete the existing math and science program in Grades 7 and 8 in one year, these pupils can begin in Grade 9 studies normally taken in Grade 10.

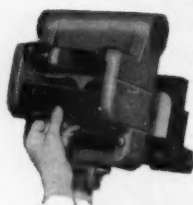
4. The content of the math and science program in Grades 7 through 9 will be determined by the administrator, subject specialists, and teachers at the appropriate level. Content may vary according to the ability and aptitude of the pupils.

5. Ordinarily, mathematics for seventh graders will include major emphasis on the extension of arithmetic skills and knowledge, with considerable attention paid to problem solving and an introduction to informal geometry. For those in the eighth grade further attention will be given to arithmetic skills and knowledge, with some introduction to algebra and a continuation of attention to informal geometry. For pupils who are capable of profiting, Grade 9 would require the study of algebra.

6. Science study in Grades 7 through 9 should be built upon the program of

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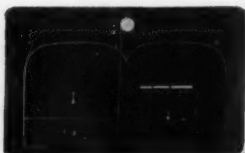
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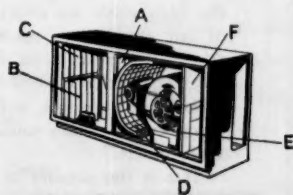
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average classroom needs about 20,000 Btuh. But 30 pupils will generate about 12,000 Btuh, lighting will add another 8,000 to 10,000 Btuh, and the sun load can account for as much as 15,000 Btuh. Since the amount of heat being generated exceeds the classroom heating requirement, it becomes necessary to *cool* the classroom to maintain a healthful, comfortable temperature. The Lennox Comfort Curtain system does this automatically by introducing cool, fresh outside air.

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science in the elementary grades. It should stress areas that make the greatest impact on the current life and surroundings. More attention is to be given to the conceptual rather than the descriptive approach to science. Adequate facilities for appropriate laboratory experiences are essential.

Recommendations for senior high school students are as follows:

1. The study of mathematics and science in Grades 10, 11 and 12 is recommended for those who have sufficient capacity and interest for achievement.

2. The sequences for mathematics will include the development of general con-

cepts, skills and the understanding of plane and solid geometry, intermediate and some advanced algebra, advanced mathematics, including trigonometry and elementary analysis. In science the sequences will include biological science, chemistry and physics.

3. The most capable students can proceed at a faster rate. For them the studies indicated under (2) may be accomplished in fewer than three years; thus in schools of sufficient size they will be given an opportunity to study in the twelfth grade subjects ordinarily taken in college, such as advanced chemistry or advanced biological science, analytical

geometry, and calculus. This will make possible advanced college placement in these subjects. In the national interest, it is desirable to offer advanced study in mathematics and science to capable and interested students regardless of the smallness of the class.

4. Students not pursuing any of the indicated sequences should be encouraged to take at least a one-year course. The one-year math course, taken preferably in Grade 10, should emphasize general mathematics concepts and their practical applications. The one-year course in science should be in biological, chemical and physical science that would emphasize functional concepts and practical applications.

Prefacing the N.A.S.S.P. recommendations is a reaffirmation of the association's faith in the comprehensive secondary school. In explanation of its recommendations, the report states:

"The traditional and frequently arbitrary time limits which now define the typical schedule of courses and classes make it difficult to program youth through efficient and appropriate sequences of learning. The emphasis upon time spent in a classroom needs to be replaced by behavioral evidence of skill, knowledge and competence.

"The period of attendance in any grade sequence, though still based upon maturity, may better provide for a variety of rates of progress, allowing for maximum learning for each student. The rate of progress within each subject field must be made increasingly flexible and for many students will include newer material which has traditionally been deferred for later consideration."

Stressing the importance of exploratory studies in junior high school, the report stated:

"Attempts to identify talented youth should begin as soon as possible and should continue from elementary through secondary school. Those pupils who have potentiality should be encouraged to continue with advanced courses in preparation for a possible career in which their science and mathematics talents may make a particular contribution."

A.M.A. Group Urges Physical Examination for Bus Drivers

ANN ARBOR, MICH. — "Because of the high value we attach to the safety of our children en route to and from school, it appears to us unwise to lower the recommended physical standards for school bus operators, even though it is recognized that they usually are not full-time drivers."

This is the manner in which Seward E. Miller, M.D., explained a recent decision of the members of the committee on medical aspects of automobile injuries and deaths of the American Medical Association. The committee recommended



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that school bus driver candidates be required to pass annually the same physical examinations prescribed for commercial and industrial drivers. Dr. Miller, a member of the study group, is affiliated with the Institute of Industrial Health of the University of Michigan here. National standardizing of requirements by licensing agencies also has been urged.

The special A.M.A. committee was appointed in 1956 because: While "the improvement of roads is the responsibility of highway engineers, and the improvement of safety factors in vehicles is the business of the automotive industry, the control of drivers and a better understanding of accident causation is the responsibility of the physician." High correlation has been found between the physical and mental health of vehicle operators and accident prevention, it is reported.

Standards for physical fitness of drivers first were formulated by the American Medical Association in 1940. Refinements have followed. In 1956 a temporary guide was published giving a long list of physical conditions which disqualify a person for a driver job.

School Gives Unique Party for "Sidewalk Superintendents"

GROSSE POINTE, MICH. — A larger turnout than is customary is anticipated for the open house this month at the new Samuel Miller Brownell Junior High School here. Reason: Citizens are expected to come back to see what progress has been made since they were guests of the board of education at a unique building inspection party one Sunday afternoon last February.

J. Harold Husband, director of administrative services for the public schools, reporting on the earlier event, said that seeing the building in the rough — conduit exposed, metal lath visible — impressed taxpayers with the variety of materials and the amount of work behind the smooth exterior and finished interior of a completed building.

More than 1000 citizens turned out for the inspection party, thus strengthening already good public relations.

Celebrates 35 Years of Safety Patrol; No Deaths in Period

SAN FRANCISCO. — The School Safety Patrol here recently observed its 35th anniversary with a parade and review; 4500 boys and girls participated.

Ever since the movement started in 1923, not one child was reported killed in traffic at the 600 patrol-guarded crossings near 140 schools in the city. School Safety Patrol units operate in 85 elementary and 14 junior high schools, 39 parochial elementary schools, one private and one state elementary school.

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Bar Association Head Tells Schoolmen World Needs Reawakening to Value of Law

DURHAM, N.C. — The future of the world rests on law and education, Charles S. Rhyne, president of the American Bar Association, Washington, D.C., told the fifth annual school law conference on the "Legal Aspects of Pupil Administration," held here June 24 and 25.

The conference, sponsored by Duke University, drew about 250 to 300 people, reportedly one of the biggest turn-outs in school law conferences.

Mr. Rhyne attributed the cause of many of our problems today to a failure to realize the law's values, asserting that "the world needs . . . a reawakening to the value of law."

To achieve this goal, he suggested that emphasis be placed upon: an application of and respect for law in the classroom; an awakening of lawyers to the needs of education; school courses in which the reasoning behind the law is taught; a volunteer speaking program in our schools by lawyers, and the combining of talents in law and education to help solve the world's problems.

At the opening session Prof. Robert Kramer of Duke University discussed "Legal Limitations of Religious Instruction." Opening his remarks by pointing

out that there had been relatively few cases on this subject decided by the federal courts, he cautioned administrators to avoid litigation as much as possible because it is costly and time consuming.

One good rule to follow, Prof. Kramer advised, is not to require or compel anyone to participate in religious instruction against his will. He pointed out that the problem of religious instruction has become intensified by the diversity of faiths and nonfaith.

In analyzing the problem, he identified certain basic principles: (1) Schools should not give preference to any particular religious sect; (2) our schools are common schools in the sense that they offer a common content and are interested in the development and inculcation of a common background and faith — faith in democracy.

Prof. Kramer then raised a significant question: What evidence is there that religious instruction, particularly Bible reading, which pupils have been receiving has been effective in producing youth with proper attitudes and appropriate modes of behavior?

The Tuesday afternoon session was devoted to "Legal Limitations and Responsibilities of the School's Control

Over Pupil Conduct." Claude L. Love, assistant attorney general of North Carolina, addressed the conference on this topic.

Lee O. Garber, director, Educational Service Bureau, University of Pennsylvania, and consultant for school law for The Nation's Schools, spoke on the legal aspects of pupil admission, assignment and attendance at the Wednesday session. Dr. Garber pointed out that, because the state is supreme in education, any law relating to pupil admission, assignment and attendance will be upheld by the courts unless it is in conflict with some provision of the state or national constitution.

In the absence of any law regarding the subject, Dr. Garber declared, rules and regulations of school boards pertaining to the topic under discussion will be held legal if they are reasonable.

Speaking at the closing session of the conference was Lawrence G. Derthick, U.S. commissioner of education, who recently headed an American team of educators sent to Russia to study existing educational conditions.

Russia has a total commitment to education as a means of supplanting U.S. leadership, Dr. Derthick said. It is evident we are in a competition with Russia the significance of which is not generally recognized, he asserted.

Makes Four Recommendations on Tuberculosis Control

WASHINGTON, D.C. — The Public Health Service recently issued four recommendations to be considered by school officials and health departments in determining policy on tuberculosis programs for school children and for board personnel:

1. Tuberculosis case-finding programs for children, teachers and other school personnel should be evaluated in the light of current knowledge concerning the prevalence of tuberculosis and the effects of radiation on the human organism. Professional advice should be sought from the state or local health department.

2. Laws and regulations that make periodic chest x-ray examinations compulsory for students, teachers and other school personnel should be reviewed and modified if necessary to allow health authorities to utilize new knowledge and techniques of tuberculosis control.

3. Consideration should be given to the use of the tuberculin test as the initial screening device to be followed by a chest x-ray of reactors. The percentage of reactors in some school and teacher populations is low enough to make this a practical procedure.

4. X-ray equipment should be periodically checked and adequate safeguards applied to protect all persons from unnecessary radiation.



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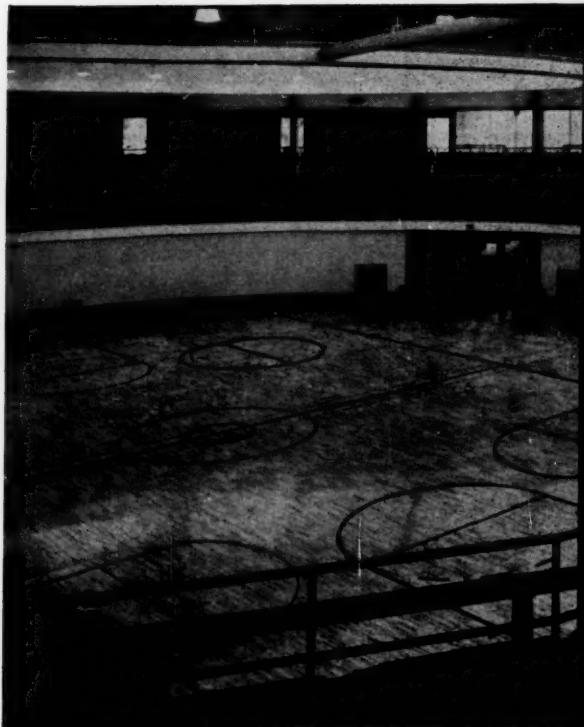
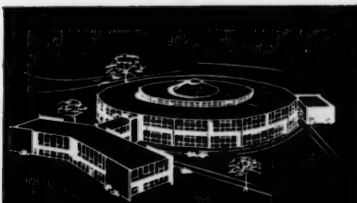


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Rural School Administrators To Emphasize Quality Education

MINNEAPOLIS. — "Channeling Our Energies for Quality Education" this year will be the central convention theme of the N.E.A.'s Department of Rural Education and its divisions. The Department will hold its second annual meeting here October 10 and 11, to be followed on October 12 to 15 by the 13th national conference of County and Rural Area Superintendents and a special program for the pupil transportation supervisors. Headquarters for the meeting is the Leamington Hotel.

Tasks which rural and small communities face will be highlighted at the opening general session of the Department of education for Vermont and president of the Council of Chief State School Officers. Gov. Orville L. Freeman will address a conference luncheon. A third speaker will be J. K. Stern, president, American Institute of Cooperation, Washington, D.C. Symposium and round-table groups will attempt to identify the "energies" available for meeting problems and achieving goals, and interest groups will consider methods of harnessing and channeling these energies.

A Sunday evening vesper service will open the four-day sessions of county and rural area superintendents, followed by a reception. Clara E. Cockerville, the assistant superintendent, Armstrong County, Kittanning, Pa., will be heard at Monday's opening session, also on the energies-quality theme. Round-table groups will aim to identify the various elements which are a part of a quality educational program.

Specific services and problems in improving the quality of instruction will be explored by how-to-do-it groups. Various educational tours, a Minnesota fellowship evening, and an all-states luncheon on the closing afternoon are planned.

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Special Milk Program Continues Uninterrupted

WASHINGTON, D.C. — President Eisenhower signed into law a bill providing for continued operation of the Special Milk Program. The program, scheduled to expire June 30, upon the President's recommendation to Congress, was extended for three more years.

The Special Milk Program makes milk available to children in more than 5000 summer and day camps, recreation centers, other child care institutions, and schools that operate during the summer.

Enactment of the bill also makes it possible for school administrators to make orderly plans for continued participation in the program when schools reopen this fall.

Sketches Profile of Suburban School Business Administrator

EVANSTON, ILL. — Salaries of school business managers of the Chicago suburban area average just short of \$9000. This was one of the findings of a survey of 82 members of the Chicago Suburban School Business Officials organization. Responses to the two-page questionnaire were received from 69, or 84 per cent.

Answers supplied included the following information:

The average suburban business official is slightly over 43 years of age, has the title of business manager, is located in a K-8 district, and has under his jurisdiction seven buildings and 4229 pupils. He has a master's degree, with an undergraduate background in business administration and a graduate background in educational administration. His primary experience for the job is educational. He has been a business official for eight and one-half years and has been in his present position for seven years.

Salary ranges were from \$5400 to \$18,600, with a median of \$8200. Districts reporting included 21 high school and 16 K-12 systems. The number of school buildings represented ranged from 1 to 32. Twenty-two of the respondents had a business background primarily.

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Engineer: John Knecht
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Gross Area: 188,000 sq. ft.
Total Contract: \$2,844,659
Heating and Ventilating:
\$314,986

IN OHIO \$1.91 sq. ft.

Young Elementary School,
Springfield Township, Ohio

Architect: W. B. Huff & Assoc.
Engineer: Paul Fleming
Capacity: 300 pupils
Gross Area: 22,000 sq. ft.
Total Contract: \$335,071
Heating and Ventilating:
\$42,025

IN ILLINOIS \$1.41 sq. ft.

Creve Coeur Elementary School,
Creve Coeur, Illinois

Architect & Engineer:
George Poppo Wearda
Capacity: 256 pupils
Gross Area: 11,800 sq. ft.
Total Contract: \$156,124
Heating and Ventilating:
\$16,664

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Reappraisal of Curriculum, Administrative Practices Calls for Broader Program, Says Edmund H. Thorne

WEST HARTFORD, CONN. — A reappraisal of the curriculum and over-all administrative practices in junior and senior high schools here with the purpose of recommending a better balanced program was conducted recently by Supt. Edmund H. Thorne and his administrative and supervisory staff.

In modifying the school program, consideration of the philosophy and pattern of the schools and the facets involved in achieving educational goals were kept in mind.

The recommendations were based on the following beliefs:

"The curriculum of a comprehensive high school dictates a unique administrative organization. The administration should provide an opportunity for youths to develop a growing understanding of themselves and the society in which they live. The right of youth, under trained leadership, to make decisions commensurate with their increasing maturity should be respected and encouraged.

"The administration of the comprehensive high school requires flexibility in grouping, scheduling and methods of instruction to permit optimum learning for each child. It establishes a continuous

system of evaluation and research to measure the effectiveness of the learning experiences of a constantly changing student body. It provides a plan for orientation and articulation to ensure the highest degree of continuity in a broad educational program. Finally, it promotes ways and means for the school, home and community to share common interests and seek some solution to their common problems.

"The modern high school provides guidance services as an integral part of its program as a vehicle through which many of these functions are fulfilled. Good guidance practices incorporate both individual counseling and group activities. They provide opportunities for both students and parents to participate in cooperative planning. Finally, they make provision for using the resources of the community as well as those within the school system in the best interest of every individual student."

Specialized programs to meet individual pupil needs were recommended. To serve the needs of a diverse student body, it was felt that a broad range of electives should be offered in foreign languages, business education, practical

and fine arts, in addition to extensive work being done in basic subject areas.

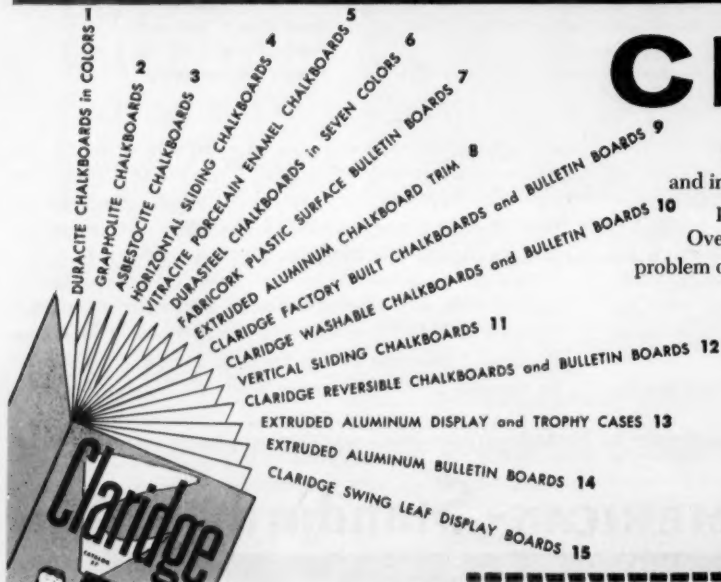
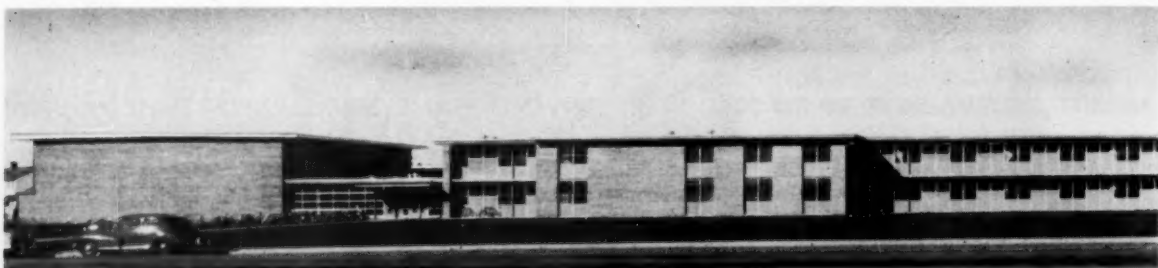
On the problem of the education of the gifted, these procedures were recommended: an accelerated program in mathematics; honors classes for other subject areas, and an advanced placement program.

Under the advanced placement program, competent students would be able to take equivalency tests thereby receiving credit through examination rather than by taking the course. They would then be permitted to enroll in advanced sections or substitute other courses that broaden their high school education.

Other considerations requested that more opportunity be made possible in junior and senior high schools for students to engage in independent self-directed study. This could be furthered through individual research projects in library, laboratory, home, community.

Teachers in all classes also were asked to strive to make the subject matter taught more purposeful and to develop in students the ability to evaluate critically what they read and hear, to analyze problems objectively and apply principles of scientific thinking.

All departments were asked to review their courses of study, to discard useless and obsolete content, and, through research findings, to evaluate methods as to



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how children could learn most effectively. Each department will be expected to make a report of its study in the near future.

The cost estimate was presented to a conference on school building finance by a committee which said 10,642 classrooms are needed at once.

One committee recommendation was that the state's \$100 million school bond support program, which expires in 1962, be extended indefinitely through a constitutional amendment. It proposed that schools be authorized to issue tax bonds for as long as 30 years, with a state revolving fund created to help districts where an "excessive tax effort is required to meet school housing needs."

State financial assistance for school construction also was suggested by the committee. These funds would be distributed to "properly organized districts" which provide a 12 grade "comprehensive educational program."

Puerto Rico Has Seminar On A-V Uses in Schools

SAN JUAN, P.R. — "Operation Boot Strap" gave another boost to education in this island recently. The second annual Seminario: Escuelas del Manana was conducted, emphasizing the use of audio-visual materials in science teaching and the construction of schools designed to

provide maximum use of audio-visual facilities.

Presented by the audio-visual department of the University of Puerto Rico's college of education in cooperation with the college of natural sciences and the department of public instruction, the three-day seminar on the "schools of tomorrow" included talks and discussion groups dealing with free and inexpensive teaching materials as well as ETV.

Walter A. Wittich, professor of education at the University of Wisconsin, and an editorial consultant for The Nation's Schools, presented an overview of the Wisconsin Physics Film Evaluation project, pointing out the value of research in planning an educational program that can cope with the problem of shortage of trained personnel. Dr. Wittich utilized materials from the local weather bureau, telephone company, and other sources to illustrate his talk.

Another speaker, William Tomlinson of Michigan State University, discussed "Closed-Circuit Television as a Medium of Instruction" and "Recent Trends in Teaching and Research." Dr. Tomlinson organized groups of science teachers into production teams.

With the use of studio facilities and the help of technicians of WIPR-TV, a government educational station, each team presented a five-minute television

program conveying a simple general science concept. Many of the teachers were in a television station for their first time.

Bilingual groups also discussed the contributions of the elementary and secondary schools to the world of science, the science studies program, and the effective teacher of science.

"Operation Boot Strap" was started in 1950 by the federal government of Puerto Rico to boost the economy of its 3 million people. As a result of certain tax advantages, new industries and service organizations, mostly American, have successfully set up business. But it was not until last year that "Operation Boot Strap" turned a critical eye on education to determine its needs.

U. S. Chamber of Commerce Opposes Murray-Metcalf Bill

WASHINGTON, D.C. — The U.S. Chamber of Commerce has put itself positively on record against the Murray-Metcalf bill (S. 3311) to provide federal aid to states for public school construction and payment of teacher salaries, in testimony before the Senate subcommittee on education. Edgar Dessen of the U.S. Chamber's education committee declared that the proposed federal aid for school construction is "neither necessary nor desirable," and would have consequences "of great detriment to America's future."



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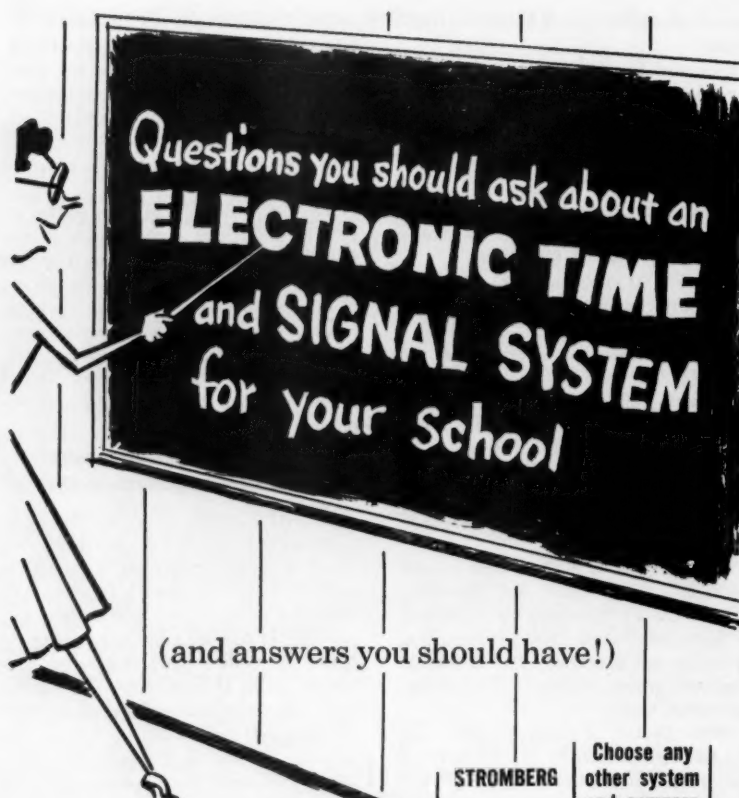
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No Handshake, Please! In a New York elementary school, children told the principal what not to do, and the principal listened! It concerned the question of whether the principal should continue to give a handshake to each child getting an S mark in citizenship in his report card. Fifth and sixth graders, asked their opinions, voted 138 to 133 against a handshake. They think a handshake reveals a mark that should be kept confidential.

College Testing. The increasing emphasis being placed upon testing for college admissions is proved by the rapid growth of the College Entrance Examination Board which is adding 25 new institutions a year. The group now includes 205 colleges and universities, and this year tested more than 400,000 students in contrast to the 80,000 students tested 10 years ago.

Tax Hikes. Fourteen out of 17 California communities have voted to authorize increases in the permissible tax rate. A San Francisco proposal would raise the permissible level of tax from \$2 to \$2.50 per hundred dollars of assessed valuation.

International Conversations. A recent \$200,000 Ford Foundation grant to the Broadcasting Foundation of America (B.F.A.) has made possible an exchange of radio programs between American stations and stations around the world. The B.F.A. already has arranged with radio outlets in 30 countries to have programs on music, literature and art prepared in English for American audiences. Seventy-seven U.S. radio stations are expected soon to broadcast foreign programs as a public service.

I.Q. Is Not Everything. A high I.Q. is only one of 13 ways of classifying a child as "gifted," says Helen Cohen, research assistant on the Gifted Adolescent Project, speaking at a Conference on Exceptional Children at the University of Illinois. Other qualities are: "getting along with others, pep and energy, character, health, creativity, good looks, psychological health, goal-giftedness, achievement, activities, athletics, humor."

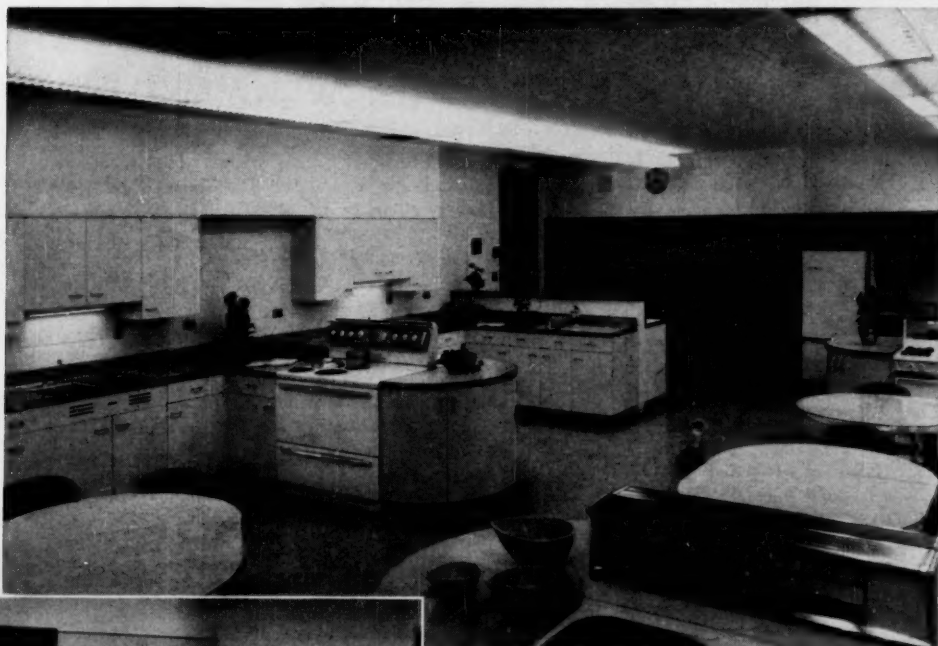
Away With Grades. Grading students is unfair and should be discontinued, contends Max S. Marshall, head, microbiology department, University of California Medical Center at San Francisco. Dr. Marshall prefers to give a thought provoking essay type of examinations which he doesn't grade but which he uses as an exchange of conversation between him and the students and as an indication of how hard a student is working. If the school requires a letter grade, Dr. Marshall gives a "B" at the end of the term.

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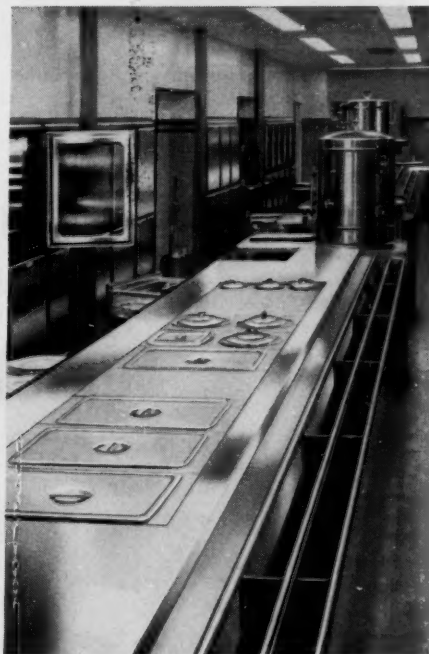
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ABOUT PEOPLE

Changes in Superintendencies

Carl H. Wennerberg, from Whittier Union High School District, Whittier, Calif., to Berkeley, Calif.

Dwight E. Twist from Petaluma, Calif., to Palm Springs, Calif.

William W. Hill, head, department of education and physiology at Berry College, Mt. Berry, Ga., to superintendent, Polk County schools, Cedartown, Ga.

Ray L. Geyer, former high school basketball coach and teacher, Peru, Ind., to

superintendent, Miami County schools, Peru, Ind.

Clarence E. Robbins from Vincennes, Ind., to Columbus, Ind.

Gladys Perry, grade school teacher, Alma, Kan., to superintendent, Wabaunsee County schools, Alma, Kan., filling out the unexpired term of **Ruth Travis**, who died recently.

Fred B. Wiegman from Stoner District school, Lansing, Mich., to White Cloud, Mich.

Victor L. Boren, high school principal, Booneville, Ark., to superintendent, Carlisle, Ark., succeeding **A. C. Shannon**, who resigned.

Kenneth O. Johnson, assistant district superintendent, Napa, Calif., to district superintendent, Woodland, Calif.

Ray O. Forbes from Oakland, Iowa, to Harlan, Iowa, succeeding **Ray Killion**, who resigned.

Gay A. Orr from Spirit Lake, Iowa, to Ringsted, Iowa, succeeding **T. G. Ahrenkiel**, who resigned.

Richard Schuchert, Dike, Iowa, to Spirit Lake, Iowa.

H. C. Goss, junior high school principal, Idabel, Okla., to superintendent, Pocasset, Okla., succeeding **Ed B. Turley**, who resigned to go to Marlow, Okla.

Ed Olvey from Marlow, Okla., to Afton, Okla., succeeding **Joe Tom Hudspeth**, who resigned after 25 years with the Afton school system.

Granville Griffin from Barnsdall, Okla., to Bixby, Okla., succeeding **C. Ray Tucker**, who resigned.

Robert L. York, industrial arts teacher and retired superintendent, Lacey school district, Hennessey, Okla., to superintendent, Hennessey, succeeding **Lee Hart**, who resigned after 30 years in the school system.

Paul Hayes from Leetonia, Ohio, to Dover, Ohio.

Fred R. Long, high school principal and athletic director, Greenview District, Jamestown, Ohio, to superintendent there, succeeding **Harry Wallace**.

J. Harold Blosser, assistant superintendent, Galion, Ohio, to superintendent there, succeeding **Dwight L. Musselman**.

Norman L. Whisler, grade school principal, Garden City, Mich., to superintendent, Centerville, Mich., succeeding **L. J. Vincent**, who resigned.

John B. Vermilya from Howard Community Schools, Niles, Mich., to Spring Lake, Mich., succeeding **J. E. Holmes**, who retired.

Sam A. Mouck from Mountain Grove, Mo., to Pierce City, Mo., succeeding **James Timmons**, who resigned.

Frank P. Dee from Bridgeton, N.J., to South Regional High School, Lambertville, N.J.

Ross Tipton from Delphi, Ind., to Auburn, Ind.

Alfred P. Clyne, elementary school principal, Quincy, Mich., to superintendent, Lakeland consolidated school, Coldwater, Mich.

Norvell R. Dice, former superintendent, Arcadia Unified School District, Arcadia, Calif., to superintendent, Garvey Elementary School District, Garvey, Calif.

A. T. Hensley, acting superintendent for Mercer County, Harrodsburg, Ky., to superintendent there.

Marshall D. Peel, principal, Ogden High School, Franklin Parish, Winnsboro, La., to superintendent of the parish, filling the unexpired term of **W. B.**



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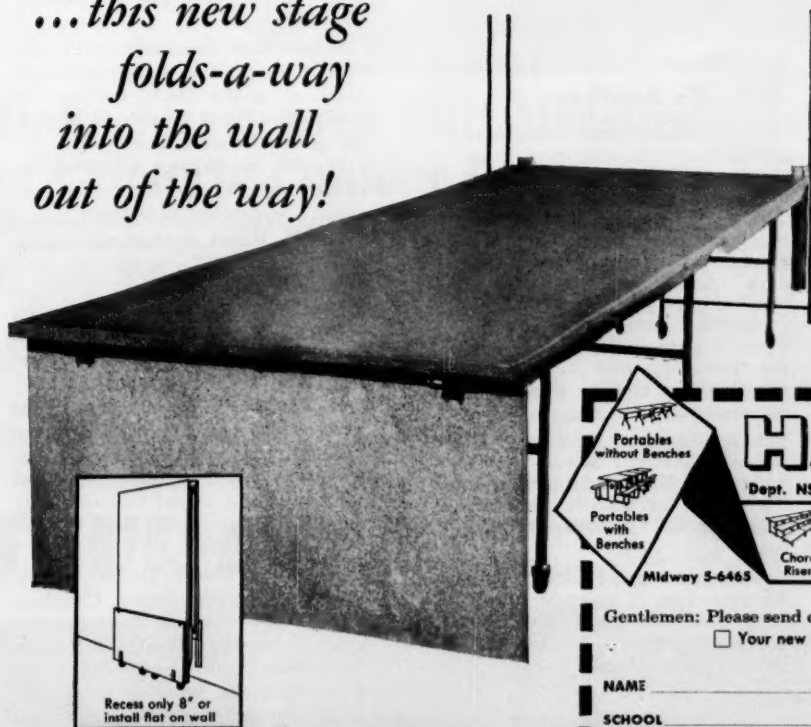
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Glover, who retired after 29 years in Franklin parish.

John F. Young, instructor, Purdue University, Lafayette, Ind., and former high school superintendent, Middlebury, Iowa, to superintendent, Plymouth, Ind., succeeding **Lyle Klitzke**, who resigned.

Harry Cole, teacher at Blockton, Iowa, to school superintendent, Northboro, Iowa, succeeding **Roger F. Miller**, who resigned.

John Minges from Volga, Iowa, to Coggon, succeeding **J. B. Hungerford**.

Harold Graham from Malta, Ill., to Mt. Carroll, Ill., succeeding **Maurice J. Siebert**, who resigned.

John T. Gannon from Pilot Mound, Iowa, to Stanhope, Iowa, succeeding **Don Green**, who resigned to go to Comanche, Iowa.

Maurice Olsen from Cambria, Iowa, to Moulton, Iowa, succeeding **W. A. Wegener**, who resigned to go to Bloomfield, Iowa.

Elmer Holbeck, high school principal, Passaic, N.J., to superintendent there.

James I. Mason, elementary administrator, Wilkins Township School District, Turtle Creek, Pa., to superintendent, Collingswood, N.J.

Max W. Meyers from Beach Park consolidated schools, Beach Road, Wauke-

gan, Ill., to grade school superintendent, Pontiac, Ill., succeeding **Arthur Speltz**, who retired after 29 years as superintendent there.

Charles R. Bode, high school principal, Edwardsburg, Mich., to superintendent for Cass County, Cassopolis, Mich.

Robert V. Lone, former superintendent for Luce County, Newberry, Mich., to superintendent, Honor, Mich.

John R. Amedei, high school principal, Bevier, Mo., to superintendent there.

William E. Coffman from Stilwell, Kan., to Schell City, Mo., succeeding **Eugene T. Jewell**, who moved to Pilot Grove, Mo.

Michael W. Fano, director of student teaching and placement, Trenton State College, Trenton, N.J., to superintendent of elementary schools, Flemington-Raritan school district, Flemington, N.J.

David A. Noonan, former school principal, Hasbrouck Heights, N.J., to superintendent, Carlstadt, N.J.

Ralph V. Westervelt, supervising principal, Guilderland Central District 2, Guilderland Center, N.Y., to superintendent, Oneida Consolidated School System, Oneida, N.Y., succeeding **Willard F. Prior**, who died in November 1957. **Albert H. Covell** has been acting superintendent.

Donald K. Phillips from New Rochelle, N.Y., to Syosset, N.Y., succeeding **Ernest Weinrich**, who has resigned.

R. Thomas Jannarone from Linwood, N.J., to Raritan Township, West Keansburg, N.J.

Richard Short, senior high school principal, Hastings, Neb., to superintendent there, succeeding **Merle Bolton**, who went to Park Forest, Ill., schools. **Dr. Bolton** succeeds **Gerald L. Smith**.

Thomas H. White, superintendent, Dalton, Mass., to the newly created regional school district in Dalton.

Carl W. Hassel, assistant superintendent, Liverpool, N.Y., to superintendent, Media Borough, Media, Pa.

Oran Teater, high school principal, Paintsville, Ky., to superintendent there, succeeding **J. C. Eddleman**, who resigned.

F. M. Walker, principal of schools and former superintendent at Tiawah, Claremore, Okla., to superintendent for Rogers County, Claremore, succeeding **Frank M. Eaton**, who moved to Foyil, Okla. Supt. Eaton succeeded **Elmer Tanner**, who resigned.

James K. Gibboney, assistant superintendent for Franklin County, Chambersburg, Pa., to county superintendent there, succeeding **Thomas W. Smith**, who resigned to become supervising principal of the James Buchanan Joint School District, Mercersburg, Pa.

Robert F. Savitt, from Farmingdale, N.Y., to Plainview, N.Y.

(Continued on Page 112d)



One Good (School) Leads To Another

"Rilco laminated-wood beams were an extremely successful part of the structure" in keeping the bid below the budget, says the architect. The beams saved time — "roof framing over one 10-classroom wing was erected by three pair of men in four days." And the inherent beauty of wood meant economy for "the laminated-wood beams were left exposed throughout the school." And the "town approved . . . we are now building another similar 20-room school."

But appearance and economy aren't the whole story. Rilco beams, arches and Rilco wood deck mean fire safety for schools, churches, industrial and commercial buildings.

There's a cost-saving Rilco member for every type of structure — engineered to your specification. For more information contact your nearest Rilco office.



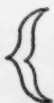
Memorial elementary school, Burlington, Massachusetts
Architects: Edgar T. P. Walker and Theodore B. Hanna, Boston
Contractor: Joseph Rugo, Inc., Boston



Gymnasium beams are 22 ply with 53'2" span
Classrooms have 28'11" x 5 1/4" x 14 1/2" beams



RILCO LAMINATED PRODUCTS, INC.
W819 First National Bank Building
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District Offices:
Fort Wayne, Indiana
Newark, New Jersey
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Duke serves up a Full Measure of Cafeteria Counter know-how



- ① Aerial view of new Duke plant . . . the most modern in the industry
 - ② The best in design know-how, backed by over 56 years' experience, is built into every unit.
 - ③ The latest equipment is used in making Duke the most rigid counter in the industry.
 - ④ Cafeteria Counter Assembly Line where the most modern methods of manufacturing are employed.
 - ⑤ Noted for their sanitary construction and advanced design, Duke Cafeteria Counters are used in schools, hospitals, industrial cafeterias, and other installations throughout the world. The sun never sets on the Thurmaduke.
- Duke has a standard Cafeteria Counter to meet any requirements. Before you buy or specify, write for the new Duke Cafeteria Counter Catalog.

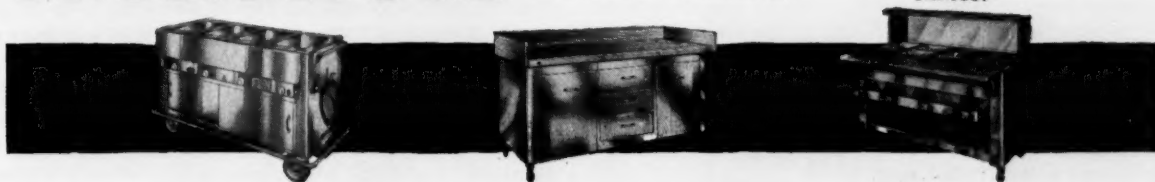
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DUKE MANUFACTURING CO.
DEPT. NO. 99 • ST. LOUIS, MO.

Here are a few of America's leading cafeterias which have installed Duke Cafeteria Counters:

American Airlines
Boeing Aircraft Co.
Motorola, Inc.
Goodyear Tire & Rubber Co.
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General Motors
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Write for complete information on the new, attractively priced AEROHOT food warmers and tables.





HEINZ
Cream of Tomato

• A deliciously smooth blend of Heinz own "pedigreed" tomatoes, sweet cream and rare spices.



HEINZ
Chicken Noodle

• Rich and tempting pieces of chicken cooked in chicken broth with Heinz own egg noodles.

Why chefs who know

1 High-quality Heinz Soups are better tasting!

When you serve Heinz Soups you *know* you're serving the finest available. For all Heinz Soups are made from choice ingredients . . . the kind the most particular chefs insist upon. All are prepared, seasoned and cooked under the supervision of master chefs. You can serve Heinz Soups with confidence because the flavor's uniformly fine in batch after batch.

2 Heinz Soups cut your kitchen waste!

Serving Heinz Soups eliminates needless preparation costs. Almost anyone can prepare a day's supply of Heinz Soups in a matter of minutes . . . and your chef is not taken from more important duties. Each 51-oz. tin makes 12 delicious servings of more than 8 ounces each. There's no waste from left-overs or spoilage . . . and you have absolute portion-cost control.

You Know It's Good Because



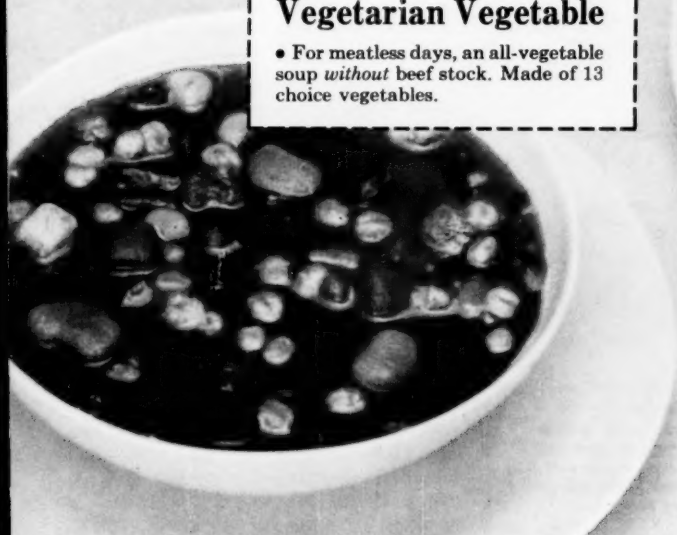
HEINZ Cream of Mushroom

• Made of tender mushrooms, cooked to a golden brown, blended with sweet cream and seasoned.



New HEINZ Chicken Gumbo

• A tasty new chicken soup from Heinz that contains flavorful okra and other tender, young vegetables.



HEINZ Vegetarian Vegetable

• For meatless days, an all-vegetable soup *without* beef stock. Made of 13 choice vegetables.

soups buy Heinz



Big Heinz Line gives menu flexibility!

With 21 popular kinds of Heinz Soups to choose from, you can add exciting variety to your daily menu . . . give your customers a wider soup selection. For meatless days alone, Heinz offers 6 tempting varieties. Of special interest, too, are these 5 *new* Heinz Soups: Minestrone, Chicken Gumbo, Chicken Vegetable, Vegetable Beef and Turkey Noodle. They're delicious!

It's Heinz!

Heinz 51-oz. Chef-Size Soups are condensed to give you twice as much.



HEINZ Chef-Size SOUPS

Bean • Beef • Chicken Noodle • Clam Chowder • Chicken Rice • Cream of Chicken • Genuine Turtle • Cream of Mushroom • Cream of Tomato • Split Pea • Vegetable • Cream of Pea • Consommé • Vegetarian Vegetable • Beef Noodle • Turkey Noodle • Minestrone • Vegetable Beef • Chicken Vegetable • Chicken Gumbo • Cream of Celery

James F. Slocum from Huron, S.D., to Minot, N.D., succeeding Paul A. Miller.

Paul Phillips, assistant superintendent, Morrisville, N.J., to superintendent there.

James Williamson, principal, Pleasant Grove High School in Seminole County, Wewoka, Okla., to superintendent, Marland, Okla.

Harry K. Heiges, in charge of U.S. Army dependents' schools in France, to superintendent, Collingdale, Pa.

Fred L. Jones, grade school principal, Salina, Okla., to superintendent there.

C. F. Feit Jr., assistant superintendent for McKean County, Smethport, Pa., to

county superintendent there, succeeding R. P. Barnhart. The new assistant county superintendent is William D. Igoe, a high school principal at Duke Center, Pa.

Paul Brunstetter, assistant superintendent for Columbia County, Bloomsburg, Pa., to county superintendent there, succeeding Ray Cole, who retired after 20 years in that post.

Homer W. Dell, assistant superintendent for Huntingdon County, Huntingdon, Pa., to superintendent there, succeeding Frank Magill, who recently retired after 33 years in the office.

Joseph P. Siesko, principal, Nanticoke,

Pa., to superintendent there, succeeding John Smith.

Arthur F. Terrell, principal, Palmyra, N.J., to superintendent there, succeeding I. Newton Cowan, who resigned.

Roscoe H. Wallace, high school principal, Catskill Union Free School District No. 1, to superintendent there, succeeding Paul T. Sellers, who retired.

Robert J. Davis from Elkton Community Schools, Elkton, Mich., to the newly consolidated Elkton-Pigeon area schools, Pigeon, Mich. R. F. Tyndall, superintendent at Pigeon, continues as assistant superintendent in charge of curriculum planning and testing and guidance development.

Harold E. Tilley, high school principal, Cassville, Mo., to superintendent there, succeeding C. C. Baker, who resigned.

John S. Rinehart from Niles Township, Skokie, Ill., to Mansfield, Ohio, succeeding Robert E. Wilson, who has resigned to accept a teaching position in the graduate school of Temple University.

In The Nation's Schools for August, Roscoe V. Shores was erroneously identified as retiring superintendent for Kansas City, Mo. Mr. Shores was deputy superintendent at the time of his retirement. He had been an administrator in the Kansas City schools since 1930.

Other Appointments . . .

William M. Duncan, director of the division of examinations, Philadelphia public schools, to associate superintendent in charge of secondary schools, vocational schools, adult education, and veterans courses there, succeeding William E. Burkard, who recently retired. John B. Taulane, superintendent of District 5, Philadelphia, to associate superintendent in charge of elementary schools there, succeeding John L. Waldman, who also recently retired.

Four new appointments to the U.S. Office of Education are: Frank L. Schick, assistant librarian, Wayne State University Library, Detroit, to assistant director of the library services branch; Lillian L. Gore, former supervisor of elementary schools for Montgomery County, Rockville, Md., to specialist for early elementary education, and Murray D. Thornburg, associate professor of industrial education, North Carolina State College, Raleigh, to program specialist for trade and industrial education. James E. Gibbs Jr., former director, public education survey for the Tennessee Legislative Council Committee, to chief of state school systems, U.S.O.E.

Wesley N. Dorn, assistant superintendent, Hagerstown, Md., to supervisor, Maryland State Department of Education.

Locker Lock Problems?



Lockers protected with Dudley Combination Master-keyed Locks are really safe.



P-570 Master-Keyed Combination Padlock
Finest of all master-keyed padlocks. Cast aluminum case, extra heavy steel shackle. Self-locking. Rotating dial.



S-540 Master-Keyed Built-in Lock
Fits all locker piercings. Quick combination change with special reset key.



The DUDLEY Master Key
Can't be duplicated on ordinary key making machines.

Teacher and Pupils Agree . . .

Dudley Locks are best, for protection to the pupil and convenience to the teacher. Pupils in school districts throughout America have grown accustomed to the dependable protection Dudleys give their personal belongings, and the sure, simple ease of operation.

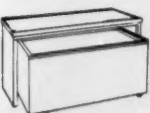
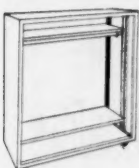
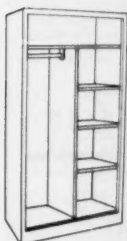
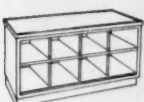
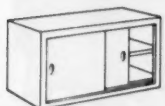
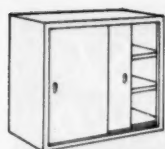
Teachers waste a minimum of time with locker lock problems, for the Dudley Master Key or Master Chart gives school authorities instant access to any locker.

Ask your Dudley representative. He's there to help you—without obligation, of course.

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LOCK CORPORATION

Dept. 910, Crystal Lake, Illinois



designed to last a lifetime...



Four foot sink unit with stainless steel top . . . separate bubbler and bubbler bowl.

Photo courtesy: Wellesley School Dept., Wellesley, Massachusetts



stainless steel classroom sink unit

- ▶ Easy to clean . . . and to keep clean
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- ☐ Please send me your full-color catalog on the complete line of new GRADE-AID all-steel school equipment.
- ☐ Please send me the name of your nearest representative.
- ☐ Please have your representative call on me as soon as possible.

Name _____

Title _____



Fixed columns
adjustable
shelves

Adjustable Height WALLMOUNTS

Schoolline® WARDROBE SYSTEMS

Solve the pupil wraps problem efficiently with Wallmount Coat and Hat Racks. Mount on any available wall space. Hat shelves and hanger bar adjustable on permanently attached columns to height for any age group. Double hat shelves and double row of spaced coat hooks accommodate 6 pupils per running foot. Basic 3' 2" or 4' 2" units interlock to make continuous racks to fit any space or capacity requirements.

OTHER Schoolline® UNITS



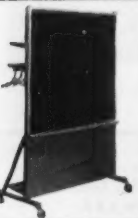
CHALKROBE®

Dual-purpose wardrobe-rack. Provides two 4 ft. hat shelves, 4 ft. Hook and Hanger rails for coats adjustable in height to all age groups. 4 ft. overshoe shelf. And, on other side a 50" x 48" chalkboard. Portable or stationary.



CORKROBE®

Identical to Chalkrobe but with pin-up cork board instead of "Chalkboard". These units permit complete flexibility in use of floor space. Can be anchored to floor, or wheeled about on casters. Hold wraps out of the way in orderly and efficient manner.



CLOSURE UNITS

With closure panels (as original equipment or add-on units) Chalkrobe and Corkrobe units serve as flexible room dividers, movable walls or screens. Widely used to enclose temporary class rooms, to "build" cloak rooms, meeting rooms, etc.



OVERSHOE RACKS

Matching units for Wallmount. Keep overshoes off-the-floor in an orderly manner.

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VOGEL-PETERSON CO.

22 West 17th Street • Chicago 9, Illinois

Retired . . .

C. Herman Grose, 62, deputy superintendent in charge of curriculum and special pupil services, Pennsylvania State Department of Public Instruction.

Howard A. Kinhart, assistant superintendent in charge of secondary schools for Anne Arundel County, Annapolis, Md., after 30 years in educational field.

E. Guy Greenawalt, supervising principal, Mercersburg, Pa.

John B. Kennedy, superintendent, Kingston, Pa.

Dale R. Rice, superintendent for 34 years, Mentor, Ohio.

E. C. Grover, superintendent, Fair Lawn, N.J., effective in February 1959.

Lewis F. Foote, superintendent, Goffstown, N.H.

P. E. Pyle, superintendent, Selma consolidated school district, Selma, Iowa, after 40 years as superintendent in Iowa.

Ralph E. Beebe, superintendent since 1927 at Naperville, Ill.

B. O. Wilson, superintendent, Contra Costa County, Martinez, Calif.

Resigned . . .

Leland G. Osborn, superintendent, East St. Louis, Ill.

W. G. Halley, superintendent, Green Springs, Ohio.

Oren D. McClure, superintendent for 20 years, DuQuoin, Ill.

E. I. Gephart, principal and superintendent for 23 years, Ashtabula, Ohio.

Virgil L. Raver, superintendent for five years, Ashland, Ohio.

A. E. Hadfield, superintendent for 20 years, Maple Heights, Ohio, effective August 1960.

Robert E. Ricketts, superintendent, Bogota, N.J.

Stuart Baker, superintendent for 10 years, Troy Township School District, Birmingham, Mich.

B. E. Mann, superintendent since 1933, Treynor, Iowa.

Wayne Swihart, acting superintendent, Metropolitan School District, Calumet Township, Gary, Ind.

Paul F. Shafer, associate superintendent, elementary education, Los Angeles.

Elsie Schorta, superintendent for nine years for Pierce County schools, Ellsworth, Wis.

Glenn W. Johnston, supervising principal, Shenango school district, New Castle, Pa.

W. W. Webb, superintendent, Nueces Canyon schools, Barksdale, Tex.

Died . . .

Clair Gale, 51, superintendent, Idaho Falls School District 91, Idaho Falls, Idaho. William G. Ward, assistant school superintendent, is acting superintendent.

Thomas F. Hodges, 56, superintendent, Community Schools, Spencer, Ind.

**YOUR BEST
SCOREBOARD
BUY...**

Naden



SCOREBOARDS

The Naden N-595 has everything—Instant-Vue numerals with plastic bezels—indirect lighting for letter panels—resonating period horn and signal lights—finest score-board construction—plus two year guarantee. For information on the complete Naden line, ask for Catalog

1N-Basketball; 2N-Football; 3N-Baseball.

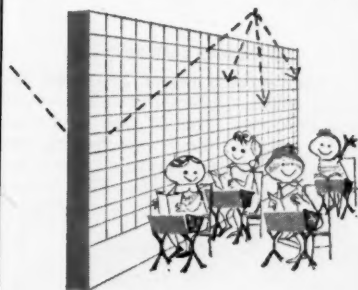
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Opaque Projector!



AV Experts are in a position to know. Find out how YOUR School can improve the teaching process. Write for the new Free brochure: "Turn Teaching Into Learning"

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EAST ORANGE, NEW JERSEY



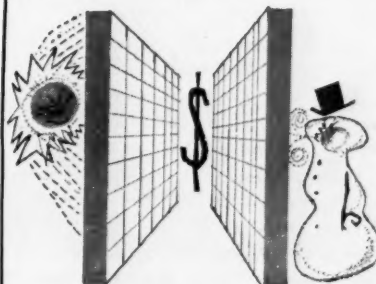
BALANCED DAYLIGHTING

PC Glass Blocks direct daylight upward to the ceiling. From here, it is diffused evenly throughout the room. Result—glare is controlled and high-contrast shadows are eliminated.



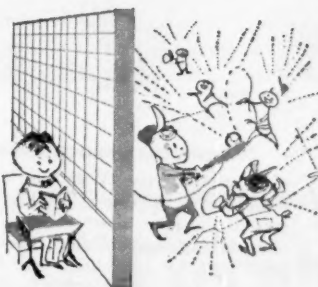
REDUCED MAINTENANCE COSTS

Because Glass Blocks are mortared into panels, there's nothing to rust, rot, or paint. They can be washed down with a hose, or cleaned with a wet mop—a definite savings feature.



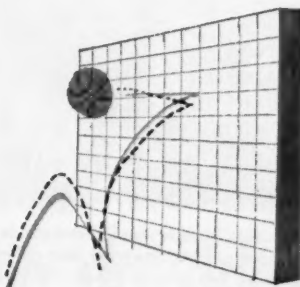
LOWER HEATING COSTS

Glass Block panels have roughly the same insulation value as an 8-inch thick masonry wall. This means lower heating costs in new and old buildings—more comfort in warmer weather.



NOISE REDUCTION

By nature of their construction—hollow, sealed glass units—Glass Blocks serve as excellent noise barriers. They help keep noises out and inside activity free from distraction.



IMPACT STRENGTH

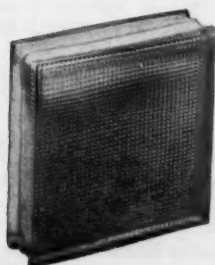
Basketballs, footballs, or vandalism can run up serious replacement expenses. Glass Blocks have saved thousands of dollars annually because of their impact strength.



ARCHITECTURALLY CORRECT

Architects recognize that Glass Blocks offer creative design solution as well as functional advantages. And our new Color Glass Blocks increase exterior design flexibility.

Here's why PC Glass Blocks are winning favor in a variety of daylighting applications... in classrooms, gymnasiums, swimming pools, stairwells, clerestories, bandrooms, corridors, entrances and other areas. An ideal product for your window modernization projects, too.



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PITTSBURGH CORNING CORPORATION

Also manufacturers of FOAMGLAS® insulation

Joseph Folse Gauthier, 58, former superintendent St. Bernard parish, New Orleans.

Carl G. Sorensen, 51, superintendent since 1948 at Plattsburgh, N.Y.

Ralph S. Rice, 55, supervising principal for 19 years at North Hills Joint Schools, Pittsburgh.

Manheim Rosenzweig, 62, lawyer and founder-headmaster of the Neponsit School, Rockaway Beach, N.Y.

Fred H. Wandrey, 52, superintendent since 1952 at Green Bay, Wis. Irene Larson, elementary supervisor there, was named acting administrator.

Pakistani Schools Get \$1.25 Million From Ford

NEW YORK. — The Ford Foundation recently announced a total of \$5.5 million in grants for the development of educational and economic programs abroad. The largest grant was \$1,249,000 for Pakistan's secondary school system.

The Pakistani Government will contribute the rupee equivalent of \$3 million to carry out the program. Other countries included in the grants are Burma, Nepal, Indonesia, Iran, India and Italy.

THE BOOKSHELF

ADULT EDUCATION

Handbook on Parent Education. Bulletin of the California State Department of Education, Vol. 27, No. 3. Revised ed. by Milton Babitz, consultant in adult education, Bureau of Adult Education, Calif. State Dept. of Education. California State Prtg. Off., Sacramento. Pp. 55.

AUDIO-VISUAL

Educational Television Today. Educational Television and Radio Center, 2320 Wastanaw Ave., Ann Arbor, Mich. Pp. 24.

Improving the School's Audio-Visual Program. A handbook for teachers and administrators. By Robert E. Schreiber, assistant professor and librarian, Educational Materials Center, Northern Illinois University. Educational Bulletin Service, Educational Materials Center, Northern Illinois University, DeKalb. Pp. 23. 25 cents.

COMMUNICATION

Mass Communication in Education. Educational Policies Commission, N.E.A. and A.A.S.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 137. \$1.50. Discounts for quantities.

CONFERENCE PROCEEDINGS

What Is Wrong With the Teaching Profession — A Second Look. Proceedings of the joint meeting of the N.E.A. and Magazine Publishers Association, April 3, 1958, New York. N.E.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 68.

WCOTP in Frankfurt, A Pictorial Report. Sixth assembly of delegates of the World Confederation of Organizations of the Teaching Profession, Frankfurt, Germany, 1957. Text and captions in English, French and German. W.C.O.T.P., 1201 16th St. N.W., Washington 6, D.C. Pp. 32.

CURRICULUM

The Role of Literature in the Core Curriculum. Bulletin of the School of Education, Indiana University, Vol. 34, No. 3, May 1958. By Ingrid M. Strom, division of research and field services. Indiana University Bookstore, Bloomington. Pp. 60. \$1.

Electricity and Magnetism. By J. Myron Atkin and R. Will Burnett, University of Illinois. Illustrated by Raymond Perlman, University of Illinois. Elementary School Science Activities Series, Rinehart & Co., Inc., 232 Madison Ave., New York 16. Pp. 58. \$1.

Music Education for Teen-Agers. By William R. Sur, professor of music and chairman of music education, and Charles F. Schuller, professor of education and director of the audio-visual center, Michigan State University. Harper & Brothers, 49 E. 33d St., New York 16. Pp. 466. \$6.

The Status of Secondary Science Education in the State of Ohio. By Charles

WACO BLEACHERS ARE TAILORED TO YOUR ATTENDANCE SIZE AND BUDGET

Mid-American Jubilee
St. Louis, Missouri
4,500 capacity—34 row



The versatility of Waco bleachers allows you to provide large or small installations at real budget prices. For example, a ten-row Waco bleacher can be converted into either a seven- or four-row unit for both indoor and outdoor events. You can also change the length and depth of Waco bleachers and locate aisles and stairways where you need them.

Erection costs are low because workmen need no special training to assemble Waco bleachers. The "Speedlock" method of attaching cross braces to end frames is the fastest locking device known and is an exclusive Waco feature. Waco's "Speedlock" is absolutely safe, practically indestructible.

Safety tests prove Waco bleachers will hold 801 POUNDS PER SEAT with no structural failure. Waco's tubular steel construction makes these bleachers extra-strong and extra-safe. Though extra strong, Waco bleachers are lightweight—the heaviest part weighs only 55 pounds.

You'll find Waco Bleacher installations at:

DuQuoin State Fair
DuQuoin, Illinois.....9,810 ... 45 row
Metropolitan Sports Stadium
Minneapolis, Minnesota.....6,800 ... 27 row
United States Naval Academy
Annapolis, Maryland.....5,664 ... 25 row

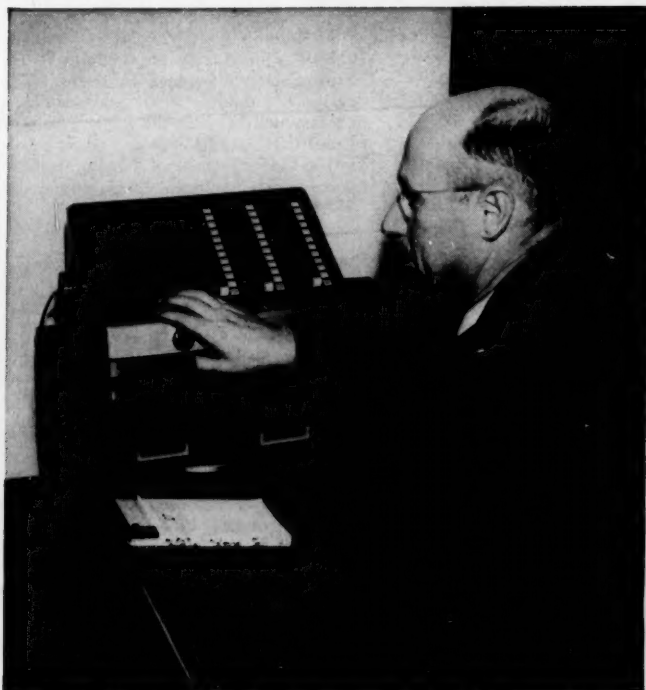
Oklahoma University
Norman, Oklahoma.....4,296 ... 31 row
Oklahoma A & M
Stillwater, Oklahoma.....3,310 ... 16 row
Fort Benning
Fort Benning, Georgia.....2,400 ... 10 row



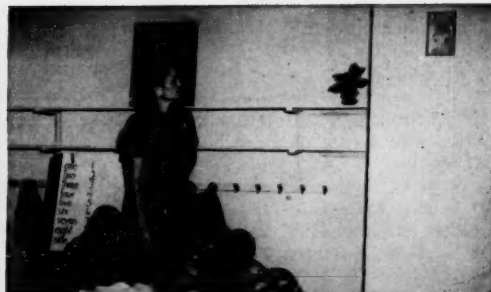
South Fulton High School
East Point, Georgia
10 row—1,000 capacity

Have a Waco engineer make a layout of a bleacher installation to fit your needs and budget. Write today. There is no obligation for this service.

Bleacher } **WACO MANUFACTURING COMPANY**
Division } 5251 W. 130th Street • Cleveland 30, Ohio
Waco Bleacher distributorships available in some choice territories.



From his desk, Dr. J. C. Witter, Superintendent of Schools, Caney, Kansas, is in instant two-way conversation with teachers.



Teacher saves steps; she answers calls from any point in room. Call from principal is announced by bright red privacy light. Teacher can also call principal.



Portable amplifier and loudspeakers provide P.A. facilities for the auditorium, gym and athletic field . . . including announcements to spectators.

For schools with low-budget problems

Executone provides complete communications, classroom privacy

Caney, Kansas, schools get all the many features of expensive console sound systems with simplified, low-cost Executone intercom. This inexpensive, all-purpose system saves time and energy for teachers and principal, increases administrative efficiency. Schoolwide announcements can be made from the principal's desk. School programs, recorded music, speeches, special events, emergency dismissals, every form of sound system transmission can reach all school areas, as well as individual classrooms.

You get these plus advantages with Executone:

- **Lower Cost**—Expensive console features now possible with new simplified wiring circuit.
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- **Easily Installed** in existing schools. In new construction, additional savings possible on wiring.
- **Small Initial Investment**—Starting with intercom, schools can add sound system features as required.
- **Space Saving**—Principal's compact control station needs only small fraction of space required by console.

More time for teaching! Teachers like the system. It saves them steps, time and energy . . . so students benefit, too! Find out what Caney schools have learned . . . how Executone School Intercom can improve *your* school administration. Just send coupon for more information.

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Manufacturers of School-to-Home telephone equipment for shut-ins

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415 Lexington Ave., New York 17, N. Y.
Without obligation please send:
☐ Complete details on Caney Schools' communication set-up
☐ Other free descriptive literature.
☐ Name of local representative.

Name _____
School _____
Address _____
City _____ Zone _____ State _____

In Canada—331 Bartlett Ave., Toronto

L. Koelsche, professor of science education, University of Toledo. Research Foundation, University of Toledo, Toledo 6, Ohio. Pp. 29.

DIRECTORIES

Handbook of Private Schools. Annual descriptive survey of independent education. 39th ed. 1958. Porter Sargent, 11 Beacon St., Boston 8. Pp. 1142. \$10.

Federal Government and States. Education Directory, 1957-58. Part 1. U.S. O.E., U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 70. 30 cents.

HIGHER EDUCATION

Statistics of Land-Grant Colleges and Universities. Year ended June 30, 1956.

Bull. 1958, No. 2. Prepared by Doris C. Holladay, reports analyst, under the direction of Mabel C. Rice, supervisory statistician, in consultation with Lloyd E. Blauch, assistant commissioner for higher education. U.S.O.E., U.S. Govt. Prtg. Off., Washington 25, D.C. 50c.

The Roslyn Story. Answers questions raised by college admissions officers about prospective candidates from the community. Prepared by the Roslyn (N.Y.) school board and a special citizens committee. Roslyn (N.Y.) School Board, Ruth Seward, Roslyn, L. I., N.Y. Pp. 20.

PHILOSOPHY OF EDUCATION

Education for Democracy. Kansas Studies in Education, Vol. 8, No. 2, May 1958. By Ernest E. Bayles, school of ed-

ucation, University of Kansas. University of Kansas, Lawrence. Pp. 32. Free on request.

New Dimensions of Learning in a Free Society. Seminar addresses, discussions, public lectures, and inaugural address delivered on the inauguration of Edward Harold Litchfield, 12th chancellor of the University of Pittsburgh. University of Pittsburgh Press, Pittsburgh 13. Pp. 289.

PUBLIC RELATIONS

How Do Business and Schools Work Together? National Citizens Council for Better Schools, 9 E. 40th St., New York 16. Pp. 47.

Public Relations for Vocational Agriculture. By V. R. Cardozier, associate professor of agricultural education, University of Tennessee. Demeter Books, P.O. Box 8645, Knoxville, Tenn. \$3.75

RESEARCH

Analysis of Research in the Teaching of Mathematics 1955 and 1956. Bull. 1958, No. 4. By Kenneth E. Brown, specialist for mathematics, U.S.O.E. Pp. 73.

Analysis of Research in the Teaching of Science July 1955-July 1956. Bull. 1958, No. 7. By Ellsworth S. Obourn, specialist for science, U.S.O.E. Pp. 55. U.S. Govt. Prtg. Off., Washington 25, D.C. 25 cents each.

SCHOOLHOUSE PLANNING

Notes on a Dynamic Theory of Vision. A study and discussion outline. 3d revision, 1958. Vol. 1. Movement, posture and vision. By Darell Boyd Harmon, Austin, Tex. Published by the author. Pp. 103. \$5.

SCHOOL LUNCH

Does Your School Rate an A. The special milk program for Illinois schools. University of Illinois College of Agriculture in cooperation with the U.S. Dept. of Agriculture. University of Illinois, Extension Service in Agriculture and Home Economics, Urbana. Pp. 7.

SPECIAL EDUCATION

Finding and Educating the Academically Talented Student in the Secondary School. N.E.A., 1201 16th St. N.W., Washington 6, D.C. Pp. 15. Free on request.

STATISTICS

Fall 1957 Statistics on Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Day Schools. Circular No. 513 revised. By Samuel Schloss and Carol Joy Hobson, U.S.O.E., U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 13. 15 cents.

TESTING

Evaluation Techniques for Classroom Teachers. By Denis Baron, associate professor, school of education, Oregon State College, and Harold W. Bernard, General Extension Division and University of Oregon. McGraw-Hill Book Co., Inc., 330 W. 42d St., New York 36. Pp. 286. \$5.50.

(Continued on Page 120)



Midwest FOLDING TABLES

PORTABLE PLATFORMS FOLDING STAGE
FOLDING BAND STANDS CADDIES

FOR YOUR SCHOOL

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Midwest offers you a complete line of folding tables for every school need. Easy folding! Compact storage! Beautiful tops! Featuring the famous Du-Honey 20 safety lock—positive protection in both the folded and the extended position. All-welded construction! Reinforced recessed steel apron. Improved leg design for added sitting comfort! Your choice of styles and a wide range of sizes.



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VOCATIONAL EDUCATION

Administration of Vocational Education. Vocational Education Bull. No. 1, Gen. Series No. 1, Rev. 1958. Regulations for the administration of vocational education programs under the provisions of the Federal Vocational Education Acts. U.S.O.E., U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 42. 25 cents.

COMING EVENTS

SEPTEMBER

23-26. National Council on School-house Construction, annual meeting, Seattle.

28-30. New England Reading Conference. Poland Spring, Me.

OCTOBER

5-9. Association of School Business Officials of the United States and Canada, 44th annual convention, New York.

10, 11. Department of Rural Education, N.E.A., Minneapolis.

12-15. County and Rural Area Superintendents, Department of Rural Education, N.E.A., Minneapolis.

20-24. 46th National Safety Congress and Exposition, Chicago.

21-24. American Dietetic Association, annual meeting, Philadelphia.

NOVEMBER

2, 3. Association of Urban Universities, 44th annual meeting, Omaha.

9-15. American Education Week. Theme—"Report Card U.S.A."

16-20. American School Food Service Association, 12th annual meeting, Philadelphia.

16-20. National Society for Crippled Children and Adults, Dallas.

JANUARY

25-28. National School Boards Association, annual meeting, San Francisco.

26-30. Annual Reading Institute, Temple University, Philadelphia.

FEBRUARY

7-11. National Association of Secondary School Principals, N.E.A., 43d annual convention, Philadelphia.

14-18. American Association of School Administrators, Atlantic City.

16-18. American Educational Research Association, annual convention, Atlantic City.

28-March 4. Department of Elementary School Principals, N.E.A., annual meeting, Los Angeles.

MARCH

1-4. National Conference on Higher Education, 14th annual meeting, Chicago.

1-5. Association for Supervision and Curriculum Development, N.E.A., 14th annual convention, Cincinnati.

APRIL

12-18. National Library Week.

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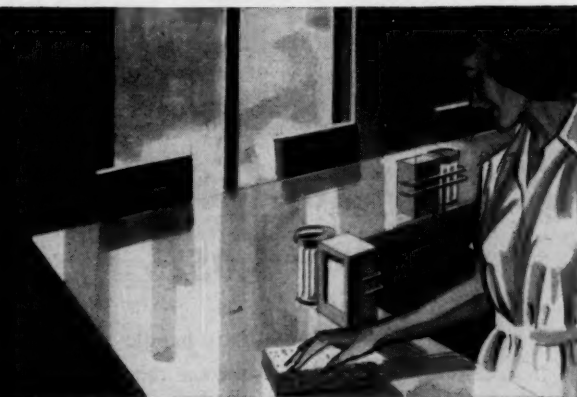
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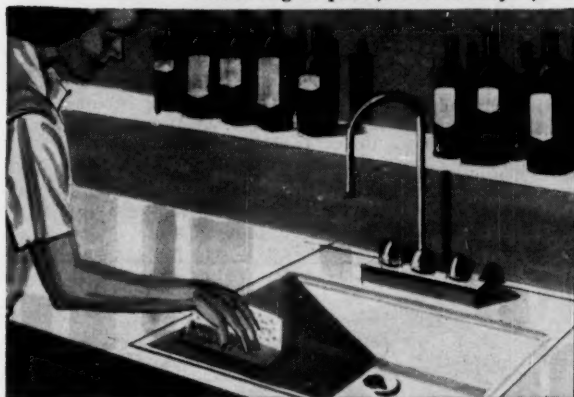
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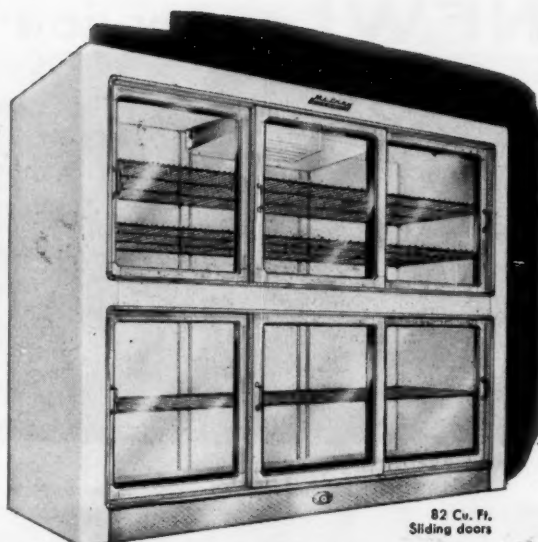
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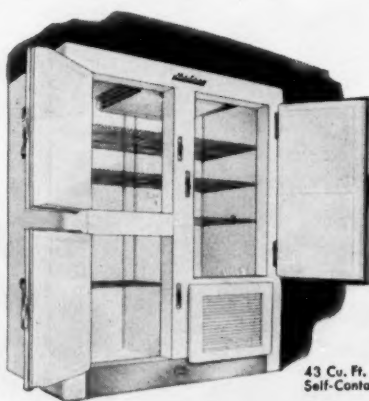
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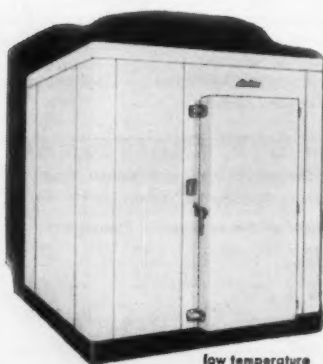


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Low Temperature Models—In sizes 6'8" x 6'8" to almost any size desired. Heights 7'7" or 8'11".

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WHAT'S NEW

FOR SCHOOLS

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card on page 161. Just circle the key numbers on the cards which correspond with the numbers at the close of each descriptive item in which you are interested. The **NATION'S SCHOOLS** will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Quadraline Seating Is Graceful and Sturdy

The Quadrangular structural members of strong square tubing are responsible

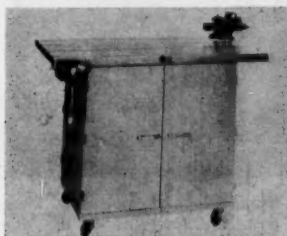


for the name given the new Quadraline classroom furniture. Designs are molded as integral units for maximum stability. The furniture offers functional mobility with seating comfort, work area efficiency, attractive appearance and ruggedness. The clean modern lines are accented by the soft colors of the frames available in mint green, sea blue, coppertone and mist gray. The high quality baked metallic enamel finish is scuff-resistant and practical. Backs, seats and arms are of Northern Hardwood veneers of laminated plywood molded in proper body contours for support and comfort. The self-adjusting back is tamperproof. Working surfaces are of high-pressure laminated plastic in a natural birch printed pattern.

The 1200 Lift-Lid Desk illustrated provides a comfortable and flexible work area with pencil tray across the entire box front. The book box is embossed for additional strength, has reinforced corners and a continuous piano-type hinge with the Quadraline non-slamming mechanism on each side. The matching 500 Series Chair is designed to provide ample leg room and continued comfort. American Desk Mfg. Co., Temple, Texas.

For more details circle #464 on mailing card.

Mobile Workbench Has Laminated Finish



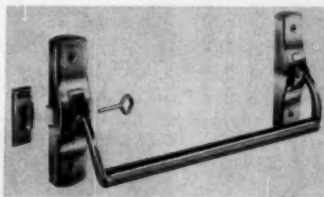
Nevamar high-pressure laminate in honey-maple finish is used on the inside

and outside surfaces of the base of the new D-9 Mobile Workbench. This assures durability, attractive appearance and easy maintenance of the cabinet base which has double doors on each side for easy access to the storage area. Carpenter's bench wood 1½ inches thick forms the top to which metal and wood vises are attached. The workbench is 34 by 22 by 36 inches in size, providing ample work and storage area. It is provided with casters and brakes for mobility or firm anchoring. National Store Fixture Co., Inc., Odenton, Md.

For more details circle #465 on mailing card.

Von Duprin Exit Device Fabricated of Stainless Steel

Type 66 is the designation of a completely new series of fire and panic exit devices available in either stainless steel or all bronze. It is available in rim, mortise lock and vertical rod models and is the result of several years of designing and re-



search on the stainless steel models by engineers of the Von Duprin Division as well as those of Allegheny Ludlum Steel. The new line is attractive and modern in appearance with simple lines which conform to current architectural design, and the stainless steel models can be kept bright by merely wiping with a clean cloth. Von Duprin Div., Vonnegut Hardware Co., 402 W. Maryland, Indianapolis 4, Ind.

For more details circle #466 on mailing card.

Resin Emulsion Floor Finish Is Non-Slip When Wet

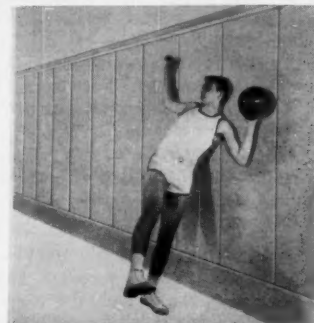
A new polymer floor finish of the resin emulsion type is announced in Poly-Kote. The new synthetic material has proved to be non-slip even when wet and has a high resistance to water spotting. It can be maintained by buffing and in heavy traffic areas it can be patched without build-up. Hillyard Chemical Co., St. Joseph, Mo.

For more details circle #467 on mailing card.

Improved Gym Wainscot Protects Players

A thick yielding cushion of polyurethane foam covered with vinyl-coated fabric is now used to form Medart Safe-Wal impact-cushioned wainscot for gymnasiums and other play areas. It dissipates and ab-

sorbs the heaviest body impact safely and noiselessly, eliminating the need for protective mats or other wall finishes. Safe-Wal can be installed over rough plaster



so that no other finish is required for the area of the wall. The vinyl-coated fabric surface is resistant to perspiration, moisture, grease and dirt and is easy to keep clean and sanitary by an occasional wiping with a damp cloth. The foam core is rot and vermin-proof. Safe-Wal is furnished in willow-green or buff. Fred Medart Products, Inc., 3535 DeKalb St., St. Louis 18, Mo.

For more details circle #468 on mailing card.

Stacking Posture Chairs Keep Level Balance

Four-point contact, with weight on the flat surface of the chair frame on the new Peabody stacking contour chairs, makes them stack level. The result is higher stacks for storage and smaller packing in shipping. The chairs stack with the back legs parallel for minimum contact.

The chairs are designed for comfort with correct posture. The back is curved outwardly at the top and bottom to prevent any possibility of edges causing discomfort, and the seat edges are turned down for comfort and freedom of movement. There is maximum leg room, minimum heel interference, and the chairs are available in various seating sizes. They



are sturdily constructed and have self-adjusting floor glides. The Peabody Seating Co., Inc., North Manchester, Ind.

For more details circle #469 on mailing card.
(Continued on page 124)

Best Buy in **FLAGS** for **SCHOOLS**

BULLDOG—most famous name in cotton bunting flags — U.S., State and School flags for outdoors. Rugged, reinforced with nylon thread.

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Work with wood parts longer than the distance between centers, and cuts close



to the headstock on gap bed lathes are possible with the new filler block accessory for use with either the Delta 12-inch variable-speed, gap bed wood lathe or the 12-inch standard wood lathe. Any tooling can be used with the new accessory that ordinarily could not be used on a gap bed lathe. Delta Power Tool Div., Rockwell Mfg. Co., 486 N. Lexington Ave., Pittsburgh 8, Pa.

For more details circle #470 on mailing card.

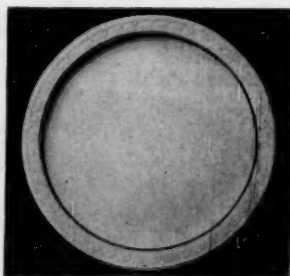
Space-Saving Refrigeration for Drinking Fountains

Where space-saving in the installation of drinking fountains is a factor, the new Halsey Taylor compact package refrigeration unit will solve the problem. The unit comes in three sizes and can be placed in wall recess, under counters, on shelves or in cupboards and connected to any type of Halsey Taylor drinking fountain at a remote location. The Halsey W. Taylor Co., 137 North Ave., N.W., Warren, Ohio.

For more details circle #471 on mailing card.

Syracuse Cardinal China Is Distinctive and Strong

Simple, distinctive styling characterizes the new Cardinal Pattern in Syracuse China. It is one of the 23 designs now available in Hospitality patterns for institutional food service where china receives rugged treatment. The attractive design is suitable for use with all decorative plans, and the high-fired construction of the china, with steel-hard glaze, en-



sures sanitation and long life. Replacement costs are low due to the unusual durability of Syracuse china. Syracuse China Corp., Syracuse 4, N. Y.

For more details circle #472 on mailing card.

(Continued on page 126)

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Lab-Volt Power Package in Table Top Model

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Lab-Volt outputs are limited to low, safe values adequate for secondary school work without danger, and provide basic control and security. They give each instructor full control at his desk for his



power requirement. Lab-Volts supply low-cost power for science experiments. Buck Engineering Co., Inc., Freehold, N.J.

For more details circle #473 on mailing card.

Glide Concentrated Cleaner in Plastic Spray Bottle

Described as an entirely new concept in cleaning, Glide is developed for maintenance cleaning to remove all traces of grease, grime and soils without acid or abrasive action. Its deep cleaning action makes it a versatile product for cleaning floors, walls and equipment in hospitals, schools, colleges and other institutions.

The non-inflammable cleaner produces no heat, fumes or odors and is supplied in concentrated form for dilution in water to produce an economical solution. Uni-Squirt dispensers, plastic spot cleaning bottles and sprayers are provided without cost and Glide is packed in unbreakable one gallon tins and in drums of five, 30 and 55 gallons. East Coast Soap Corp., 89 Coffey St., Brooklyn 31, N.Y.

For more details circle #474 on mailing card.



for maximum pupil capacity. All metal bus body parts are cleaned, bonderized, primed and baked after fabrication but before assembly to seal out rust. Wayne Works, Inc., Div. of Divco-Wayne Corp., Richmond, Ind.

For more details circle #475 on mailing card.

Electric Hand Sander Has Large Capacity

The Model 564 electric hand sander has a four-inch abrasive belt. The large-capacity model is especially adaptable for vocational shops as well as for school maintenance work. The extra large four by 24-inch abrasive belt and rugged motor provide extra power and large sanding surface. The non-slip rubber timing belt drive requires no lubrication and the sander has a number of other features making it efficient and effective in operation. Porter-Cable Machine Co., 123 Exchange St., Syracuse 4, N.Y.

For more details circle #476 on mailing card.

Superamic Coach Has Structural Innovations

The newest concepts of design and styling are incorporated into the new Wayne Superamic School Coach. It is engineered for maximum passenger protection and driver safety and includes structural innovations for increased impact resistance. The Superamic wrap-around windshield has enlarged proportions to eliminate blind spots and the Lo-Dip corners give visibility immediately in front of the coach. The Superamic is engineered for ease of handling, smooth comfortable riding and

(Continued on page 130)



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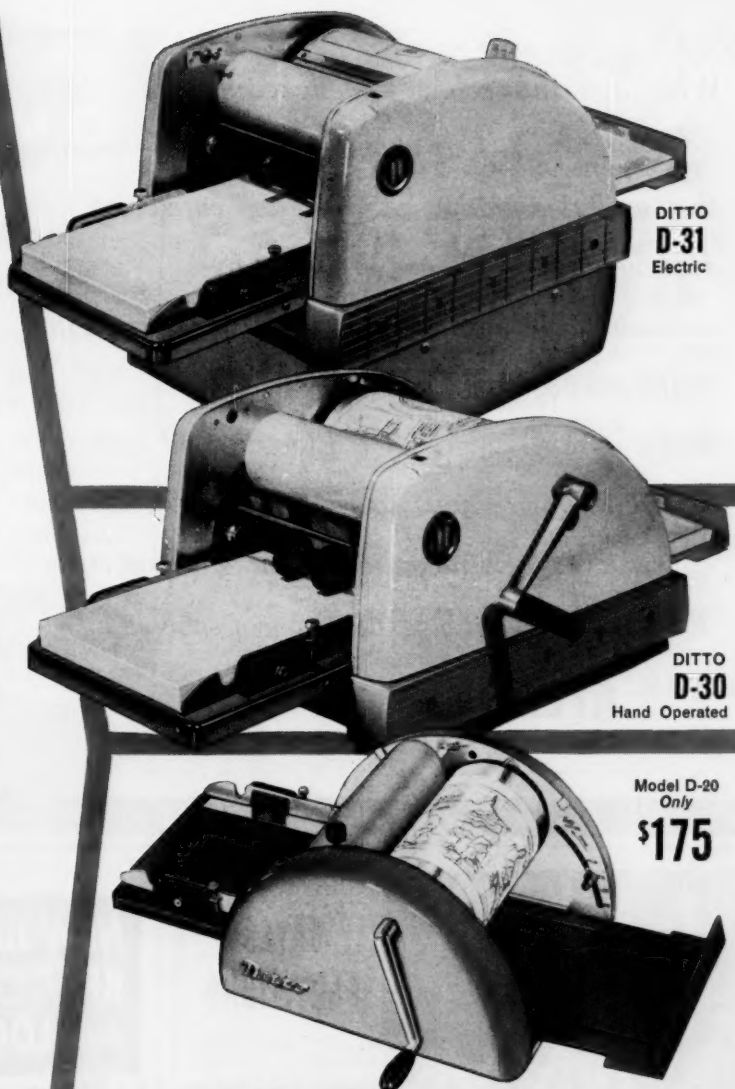
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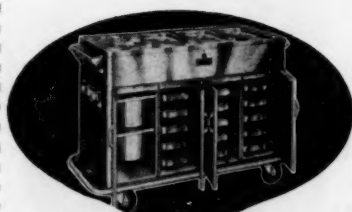
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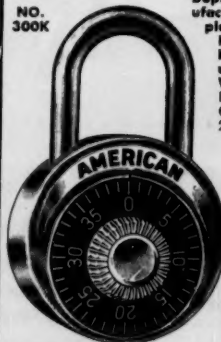
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- Specially low priced to fit school budget.



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- Added key feature permits supervisory inspection of lockers or in case combination is forgotten by user.

- Double-bitted brass key with extra slotted key way makes duplication difficult.

- Heavy construction—Precision built.

- 64,000 possible combinations.

Junkunc Brothers, Dept. NS-97. Manufacturers of complete line of Padlocks and Kindred Products. 1145 West Garfield Boulevard, Chicago 21, Ill.

Provides
Greatest
Protection
at Lowest Cost

- ✓ Self Locking—locks upon closing.
- ✓ Big, husky—Easy to see. Easy to dial.
- ✓ Stainless steel case. Bright finish.
- ✓ Smooth operation.
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- ✓ Unconditionally Guaranteed.

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FOR
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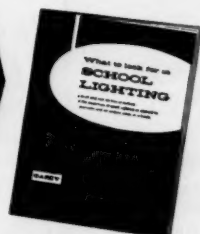
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Garcy Lighting manufactures a complete line of school lighting fixtures. With the help of Garcy representatives, located in all major cities, you have one source for all types of standard or specially engineered fixtures . . . from major requirements such as classroom and work areas to minor applications such as bulletin boards and trophy case lighting.

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FOR SIMPLE, STURDY ASSEMBLY CENCO® LATTICE ROD CLAMPS

Speedy assembly for all types of laboratory set-ups. Safe, dependable, exceptionally rigid. Easy to add or remove rods without dismantling structure. Made of tough alloy. Lock securely to rods by flush Allen screws.



No. 19092 Lattice Rod Clamps in package of 12 with wrench

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Reduce Floor Cleaning Costs



WITH AN ETTORE FLOOR SQUEEGEE

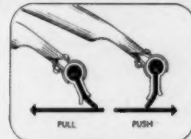
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SATISFACTION GUARANTEED—OR YOUR MONEY BACK

Put these ETTORE advantages on your clean-up crew!

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KENMORE, NEW YORK

Dear Mr. Steccone:

Your sample floor squeegee arrived this morning and I have immediately requested your local distributor in Buffalo, New York to supply us with several for our new school buildings.

I would like to state here that this squeegee is what we have been looking for for the last few years.

The little man on your brochure says exactly the right thing, "At last a real floor squeegee."

You can be assured that this squeegee will become standard equipment for our schools from here on in.

Very truly yours

KENMORE PUBLIC SCHOOLS

Robert Colley
Director
Buildings and Grounds

SEND FOR YOUR FREE SAMPLE

MAIL THIS COUPON ATTACHED TO YOUR LETTERHEAD

STECONE PRODUCTS CO.

826 - 71st AVENUE, OAKLAND 21, CALIF.

Without obligation, send me one 18" ETTORÉ Floor Squeegee.

Name.....

Address.....

Aluminum Plate Covers Available in 12 Sizes



Designed to fit institutional plates from 8½ to 11½ inches, the new series of Wear-Ever aluminum plate covers retains the brilliant finish after soap and water washing. The line is available in 12 sizes, fin-

ished in Silver Glow or Golden Glow. The special indented covers permit stacking of loaded plates in use, yet they nest perfectly for storage in minimum space. Wear-Ever Aluminum, Inc., New Kensington, Pa.

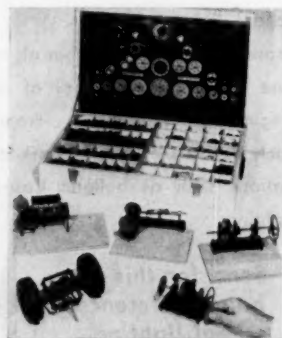
For more details circle #477 on mailing card.

Instructional Tool Available in Machine Construction Kit

Instructors in high school physics and science courses as well as college, university and trade school courses in kinematics, machine design, automation and construction will find considerable interest in the new FAC machine construction kit.

Created by Mark Sylwan, a Swedish inventor, and precision-made in Sweden, the FAC system makes use of a basic construction concept of round rods and beams assembled into frameworks by rugged clamping means. An unusual variety of precision-machined mechanical components is supplied with each kit.

The name of the kit, FAC, comes from the Latin for make or do since it is designed to assist in teaching students by having them assemble the parts to make machines and other mechanisms. It also encourages creation of new machine designs by creative students. Smooth-operating, precision-detailed mechanisms can be



constructed with standard FAC kit components. Motorized precision laboratory equipment can also be quickly assembled with the kit components to provide laboratory economy. The basic FAC X1 instructional kit has approximately 2700 parts assembled in a sturdy hardwood case. Extra standard parts for expanding the kits are available. FAC Division, 9551 Grand River Ave., Detroit 4, Mich.

For more details circle #478 on mailing card.

Arno Elementary School

ALLEN PARK, MICHIGAN

Relies on NATIONAL SYNCHRONOUS 3-WIRE ELECTRIC

Eberle M. Smith Associates, designers

Corridor Clocks (Centrally Controlled)



**STYLE 023 Double-Face
NATIONAL Corridor Clock**

Styled to occupy a minimum space and, at the same time, provide maximum distance legibility. Style 023C is available if ceiling hung clock is preferred.

Throughout the Arno School, National Dual Motor, group resettable synchronous clocks, using 15" dial Style 023-15DM double-faced corridor clocks in the halls, as illustrated at the left, and 12" dial Style 030-12DM flush mounted clocks in all class rooms. These clocks are all wired on a 3-wire circuit that runs back to the No. 974 reset control panel in office, located adjacent to a National No. 22-12M electric program clock that serves a dual purpose—a pilot clock to visually indicate the System Time throughout building, and—to automatically ring the inside and outside bells each period for class change, and dismissal of students at day's end.

Room clocks are also available for surface mounting, Style 010 with 8", 10", 12", 15" or 18" sunburst dials, as selected for room size.

Flush clocks are also made in these sizes, and mount over recessed wall boxes, set into the wall during construction.

For existing buildings, the Style 010 surface mounting clock, with sway-proof clock hanger plate is suggested.

NATIONAL 2-WIRE ELECTRIC CLOCKS THAT PLUG-IN THE 110 V. AC LIGHTING CIRCUIT

These clocks, using the same cases, Style 010, 030 or 023, are installed primarily to provide Time Service, and are regulated by the frequency of the alternating current by your Public Utility, the same as conventional household self-starting electric clocks. They do not require a special centrally controlled circuit.



They tell time accurately—but more than that, they are attractive, having a custom design appearance that blends with the surrounding architecture. They are furnished with sunburst aluminum dials, giving the clock a beautiful lustre, that will not discolor.

Brochures describing the entire line of NATIONAL clocks and signal equipment available on request.

Be sure to write for your copies of "Once Upon a Time", an informative story of TIME, written expressly for school children.

NATIONAL TIME & SIGNAL CORPORATION
21800 WYOMING AVENUE DETROIT 37, MICHIGAN



can be used in combination with the Kent Drum-Seal in extra capacity boiler cleaning operations. The motor is cooled by a separate current of air and protected against dust, dirt and water. Four ball bearing swivel casters make it easy to handle. The Model 65 is designed to handle all cleaning operations on walls and floors. The Kent Co., Inc., Rome, N.Y.

For more details circle #479 on mailing card.

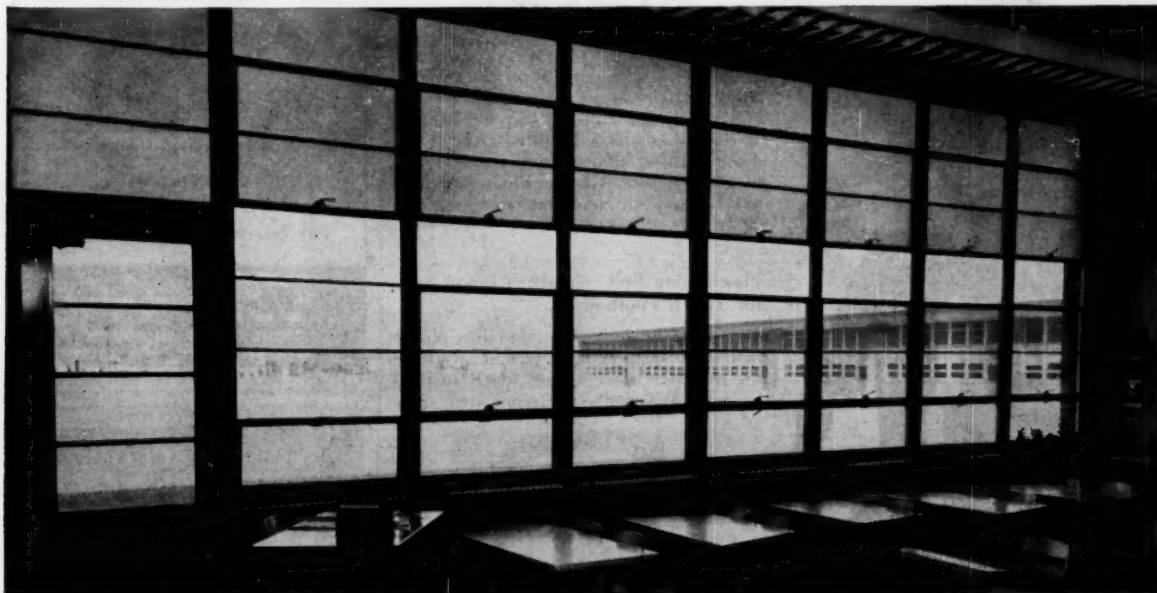
(Continued on page 132)

coolite glass...



architect's choice for better

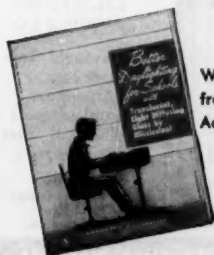
Daylighting



Architect: Harstern, Louis and Henry, A. I. A., Louisville, Ky.

Glazing: Pittsburg Plate Glass Co., Louisville, Ky.

Mississippi maintains an experimental school building on factory grounds for the study of daylighting. Take advantage of the company's wide experience. It's technicians are ready to help you with every daylighting problem.



Write today for
free catalog.
Address Dept. 15.

Softened Illumination Diffused Deep Into Interiors Helps Make Classrooms Bright Without Discomfort

Classrooms in the Goldsmith Lane School are bright with Coolite-conditioned daylight by architect's studied specifications. Luxlite Coolite, heat absorbing and glare reducing glass by Mississippi, was installed in the upper three rows of sash to flood interiors with softened, eye-easy, natural illumination without discomfort of solar heat or harmful glare. Rooms seem larger and friendlier. The entire atmosphere of the classrooms is more conducive to study. Students see better, feel better, work better, under Coolite-conditioned daylighting.

These are among the carefully considered reasons that motivate many architects to specify Coolite for their outstanding schools, as well as in their other designs. And these are good reasons why you, too, should specify Coolite when you build or remodel your schools.



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He is your School Supply Salesman who regularly stocks and sells the nation's best school art materials.

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He thinks of selling as a service and stands ready to share his experience with you whether an order is for one jar of color or hundreds.

**YOUR "PRANG-MAN" KNOWS
TODAY'S EDUCATION NEEDS.
TALK TO HIM TODAY!**



**THE AMERICAN
CRAYON COMPANY**
Sandusky, Ohio New York

**Heavy Duty Vacuum
Features By-Pass Motor**

The new E-Con-O-Vac line of vacuum cleaners offers efficient operation with economy. Model 88 features a powerful 1 1/4 h.p. air cooled by-pass motor with intake and exhaust openings in the durable, integral cast aluminum head. It is excellent for both wet and dry pickup and can



be used as a vacuum or as a powerful blower. Model 88 has a convenient push-pull handle and recessed carrying handles as well as an attached utility basket. It has a water lift of 66 inches and a tank capacity of 19 gallons. **General Floorcraft, Inc., 421 Hudson St., New York 4.**

For more details circle #480 on mailing card.

**Plastic Flag Belt
for Touch Football**

A specially-designed adjustable plastic belt with snap-on flags is now available for use in schools having touch football leagues. Arguments are eliminated since



the plastic flags are attached to snaps, one on each side of the belt, which pull free when jerked sharply. They are easy to attach and hold securely unless grasped. Belts and flags are available in red or yellow, to fit waist sizes from 22 to 40 inches. There are no sharp-edges and material is easily cleaned. **W. J. Voit Rubber Corp., 2945 E. 12th, Los Angeles 23, Calif.**

For more details circle #481 on mailing card.

**Packaged Automatic Boiler
Is Light, Low-Cost Unit**

The Model 5 Powermaster packaged automatic boiler is designed to meet the need for a lighter, low-cost unit. It retains all the important features of higher cost equipment and is constructed in both high pressure and low pressure designs for both steam and hot water service. Electronic programming and safety controls are provided. **Orr & Sembower, Inc., Box 1138, Reading, Pa.**

For more details circle #482 on mailing card.

(Continued on page 134)



B IS FOR *Burke*

and "CLIMB-AROUND" fun

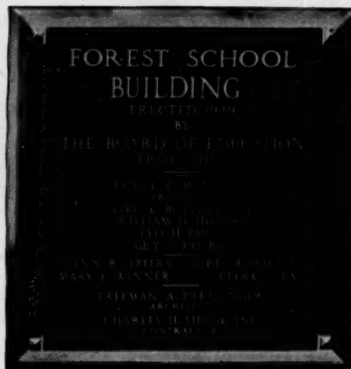
So safe! So stable! AND such a variety of climbing fun! Can't tip—even without concrete footing. Sides sloped for SAFETY. All edges rounded for SAFETY. Supported for SAFETY with Burke's unique interlocking clamps.

**Complete Line
of Playground Equipment**

For Information Write Dept. B

the J.E. Burke Company

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NEW BRUNSWICK, NEW JERSEY



BRONZE

MEMORIALS • PORTRAIT TABLETS
HONOR ROLLS • DONOR PLATES



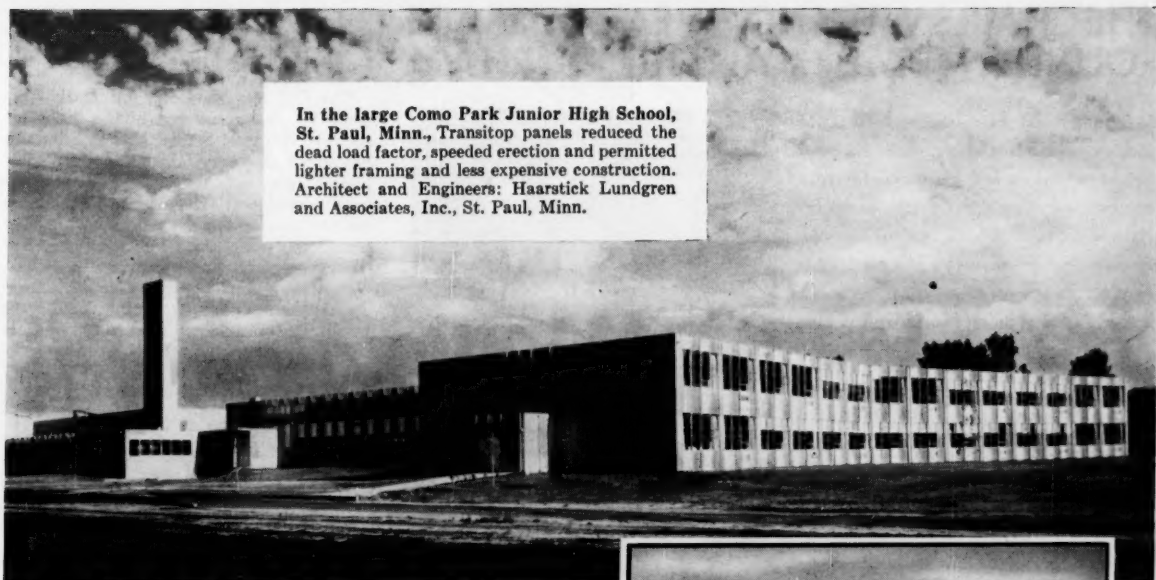
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In the large Como Park Junior High School, St. Paul, Minn., Transitop panels reduced the dead load factor, speeded erection and permitted lighter framing and less expensive construction. Architect and Engineers: Haarstick Lundgren and Associates, Inc., St. Paul, Minn.

The Woodhull School, Lansing, Michigan, built of pre-engineered, modular, expandable units uses Transitop panels to achieve speed and economy in construction. Designed and built by Schoolmaker, Inc., Ann Arbor, Michigan.



For tomorrow's schools...

Johns-Manville PRE-PRIMED TRANSITOP[®]

building panels cut costs, speed erection,
permit colorful curtain wall construction



Johns-Manville Pre-Primed Transitop building panels are being widely and increasingly used by architects and engineers in the construction of modern schools. As a result, educators and taxpayers are enjoying the advantages of quality-built schools with substantial dollar savings in building costs.

Transitop is an insulating structural panel, consisting of an impregnated core faced on two sides with incombustible Asbestos Flexboard[®] sheets.

Both faces of Transitop panels are pre-primed at the factory, eliminating priming on the job. Thus the use of color, as an expression of decoration, is completed faster at less cost.

Used for panelized curtain wall construction or for interior walls, Transitop panels are available 4' wide by 8' up to 12' in length; in thicknesses of $\frac{1}{4}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ ", and 2". In the $\frac{1}{4}$ " thickness they weigh only 4.7 lbs. per square foot. For illustrated brochure "J-M Asbestos Transitop," write to Johns-Manville, Box 158, New York 16, N. Y. In Canada, Port Credit, Ontario.



JOHNS-MANVILLE



THE CHAIRS WITH NO "WEAR OUT" ARE FOLDING METAL CHAIRS BY DURHAM

In folding metal chairs, specify DURHAM and get durability along with the most handsome styling and best value for your equipment dollars. Buy Durham chairs for classrooms, auditoriums, cafeterias, conference centers—anywhere you need chairs easy to set up, fold, store, set up again. Solid comfort too! Write today for catalogs. Be sure of the best—buy DURHAM!



Complete line of tubular and channel steel frames, all-metal and upholstered styles for adults and juveniles. Also stack chairs, folding tables, chair-ladders, steel shelf unit, utility carts. See catalog for superior construction features.

New Folding
Tablet
Armchair



Exclusive!
Wrap Rack

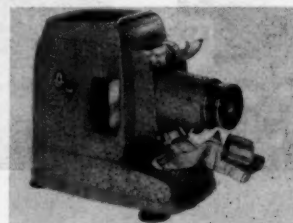
DURHAM Manufacturing Corporation
Dept. N-98, Muncie, Indiana

America's Most Complete Line of Folding and Informal Furniture

Filmstrip Projectors Have Increased Light Output

The first new developments in the former SVE line is offered in the 500 watt and the 750 watt School Master Filmstrip Projectors announced by Graflex. A completely new optical system plus the recently developed Sylvania Tru-Focus lamp are features of the new units which have considerably increased light output. They thus give good results in rooms not completely darkened. Increased air circulation assures cool operation and a Bausch & Lomb coated and color corrected projection lens gives sharper images.

The new projectors can be used for both filmstrips and two by two slides. The



single slot film channel simplifies threading and the dual control permits film advance from either side. The all aluminum casting gives durability with minimum weight and the Handi-Handle facilitates transportation from room to room. Graflex, Inc., Dept. 106, 3750 Monroe Ave., Rochester 3, N. Y.

For more details circle #483 on mailing card.

Jet-Dri Enamel Is Multi-Purpose Finish

Fast drying, excellent resistance and ease of application are some of the features of the new Jet-Dri Multi-Purpose Enamel. The new non-toxic material containing CCR37 dries in 15 minutes when applied by brush, roller or dip and even faster when sprayed on. It gives a baked-enamel-type finish with excellent coverage on wood, metal, masonry, composition materials or plaster. It is resistant to abrasion, oils, acids, alkali, alcohol or hot or cold water. Available in 12 attractive colors plus black, clear, white and aluminum, Jet-Dri can be used on walls, floors, cabinets, woodwork, furniture, equipment and other surfaces, indoors or out. Consolidated Chemical & Paint Mfg. Co., Inc., 456 Driggs Ave., Brooklyn 11, N.Y.

For more details circle #484 on mailing card.

Morton Salt and Pepper in Individual Packages

Easy-to-open, simple-to-use plastic-faced packs of Morton salt and pepper are now available for use in cafeterias and lunchrooms. Called Morton Midgets, the packs have a clear plastic face with cardboard backing and a miniature pouring spout which permits shaking out contents without spilling. The new packs improve cleanliness, eliminate shaker refilling, breakage and pilferage and permit portion control. Morton Salt Co., 110 N. Wacker Dr., Chicago 6.

For more details circle #485 on mailing card.
(Continued on page 136)

The NATION'S SCHOOLS

Your school deserves the best FLAGS BANNERS



INDOOR AND PARADE FLAGS

FEDERAL ARTGLO—The highest grade of Bemberg rayon, especially woven for our finest flags. Specified by the United States Government for official flags.

COLONIAL ARTGLO—A beautiful taffeta rayon with brilliant lustre. Attractive looking and moderately priced.

OUTDOOR FLAGS AVAILABLE ALSO. MADE OF DEFIANCE (cotton), NYL-GLO (nylon) AND NYLANIN (75% nylon-25% wool) BUNTING

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HOW CLEAN

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Hillyard **Clean-O-Lite®**

Gets the Dirt and Sanitizes—in Simple One-Step Application



Growing concern over the tragic spread of deadly infections has been reported in Medical journals, Saturday Evening Post, Readers Digest, and others.

One of the important causes is airborne dust, which harbors the bacteria. This fine dust has unusual power of movement; a person walking over a floor can literally stir up an invisible cloud of it.

Economical Hillyard CLEAN-O-LITE, developed to meet today's higher standards for sanitation in public buildings, is a concentrated liquid detergent, deodorizer and sanitizer. As a cleaner, it ranks

with the most efficient in loosening and lifting dirt without damage to the floor.

At the same time, it has a high certified effectiveness in controlling bacteria on the floor. This sanitizing action is residual—sanitizing properties remain on the surface cleaned.

A special quality of CLEAN-O-LITE is the fact that it deposits no visible film or scum. It will not build up, or discolor floor or finish. Cuts labor time—it requires no rinse. Saves material cost—it cleans and sanitizes effectively in a one-to-forty solution. This is welcome news for the maintenance budget!

ASK YOUR HILLYARD "MAINTAINEER®"

to help you draw up a comprehensive maintenance program covering all floors. His suggestions can lead to heightened floor appearance and wearability—and to lowered maintenance costs. No charge or obligation; he's

"On Your Staff, Not Your Payroll!"

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- ☐ Please send me complete information on ways to combat airborne infections through floor maintenance.
- ☐ Please have the Maintaineer call to discuss floor maintenance problems.

Name

Institution

Address

City State

Dry Mounting Press Mounts Pictures Without Paste



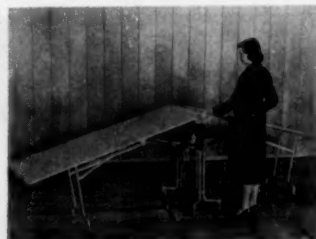
The Educator Dry Mounting Press for use in school classrooms and libraries

mounts pictures, maps, graphs, charts, drawings and other teaching or study material on any backing without paste or glue. The press is electrically operated and a thermostatic heat control can be adjusted through a range from 180 to 350 degrees F. for mounting even the most delicate color prints with safety. Only 12 by 15 inches in size, the press is so simple to operate that it can be used by grammar school pupils and a safety device protects the heated area to prevent the possibility of burns. The operation of the machine is described in a booklet on this five-second dry mounting system. Seal, Inc., 8 Brook St., Shelton, Conn.

For more details circle #486 on mailing card.

Mobile Table Unit Folds in Seconds

In just three seconds, with minimum effort, the new Howmatic "T" benchless Mobile Table can be opened or folded. This is accomplished through the Howe automatic "floating action" and counterbalanced construction. The counterbalancing keeps the unit safely in suspension when partly opened. The center carriage supports the unit at all times, keeping the end legs from dragging in opening or closing. In the open position, the unit is



secured by an automatic foolproof lock. A safety gap protects fingers and the low center of gravity prevents tipping.

The Howmatic "T" benchless unit is 12 feet long, providing room for 14 to 18 chairs. It is easily cleaned, compact and maneuverable, moving on four large, hard rubber swivel casters. Howe Folding Furniture, Inc., 1 Park Ave., New York 16.

For more details circle #487 on mailing card.

HERRICK STAINLESS STEEL* REFRIGERATORS

will help you



*Also available with white enamel finish

If you're a "sharp" man with a pencil, you'll appreciate what HERRICK can do for you.



HERRICK Model TSS66
Top Mounted Reach-in

HERE'S HOW HERRICK REFRIGERATORS CONTRIBUTE TO OPERATING ECONOMY

Prevent costly food spoilage
Herrick's just-right temperature and humidity keep foods fresher longer... preserve natural flavor and goodness.

Make possible bulk buying and efficient meal planning
You can take advantage of lower prices and be sure foods will stay in prime condition.

Provide the ultimate in sanitary food storage
HERRICK stainless steel interiors and exteriors are impervious to food acids... wipe sparkling clean with a damp cloth.

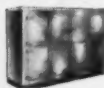
Save waste motion by making food convenient for the chef
All compartments are easily accessible. Automatic slam-shut door latches close solidly. Tray slides available for all models.

Assure low-cost trouble-free service through the years
Extra heavy-duty construction means more value per dollar. HERRICK costs less by the year as the years go by.

ASK ABOUT HERRICK'S COMPLETE LINE



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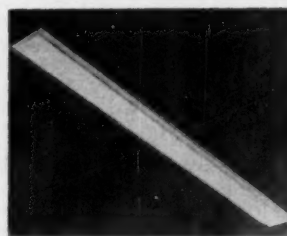
You'll be ahead with
HERRICK
The Aristocrat of Refrigerators



HERRICK REFRIGERATOR COMPANY Waterloo, Iowa
Write Dept. N for name of nearest HERRICK supplier.

Recessed Troffer Luminaires Have High Output Lamps

The new Argus series of recessed troffer luminaires employs very high output lamps to produce custom high level lighting at a low cost. Designed for use in contemporary architecture, the Argus series produces continuous lines of unbroken light, completely integrated with ceiling construction. They are available in widths up to 12



inches and in units up to four lamps. Standard lengths are four, six, and eight feet. Lighting Dynamics, 802 W. Whittier Blvd., Whittier, Calif.

For more details circle #488 on mailing card.

Plastic Surfacing Material in Spungold Pattern

An attractive new pattern is available in General Electric Textolite plastic surfacing material. Spungold has a wisp of gold veining with a shower of gold metallic flecks and is offered in beige, white, pink, turquoise and General Electric's Mix-or-Match yellow. General Electric Co., Laminated Products, Coshocton, Ohio.

For more details circle #489 on mailing card.

(Continued on page 140)

Libbey *Columbian* Tumblers...

attractive and durable, for the most economical restaurant and beverage operation



The complete line of Libbey Columbian Tumblers provides the right glass for every beverage. And because they're Heat-Treated, these tumblers stand up under hard usage... deliver an amazing number of servings to assure operating economy. Economy is assured by the famous Libbey guarantee: "A new glass if the rim of a Libbey 'Safedge' glass ever chips."

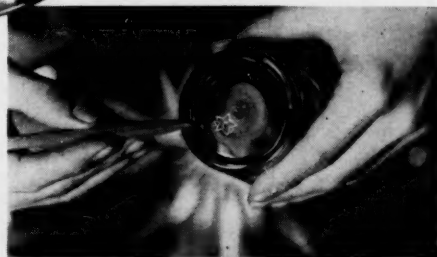
The attractive shape of Columbian Tumblers lends beauty to table settings, and every glass can be decorated with your crest or design for added prestige and distinction.

MAKE YOUR OWN SURVEY

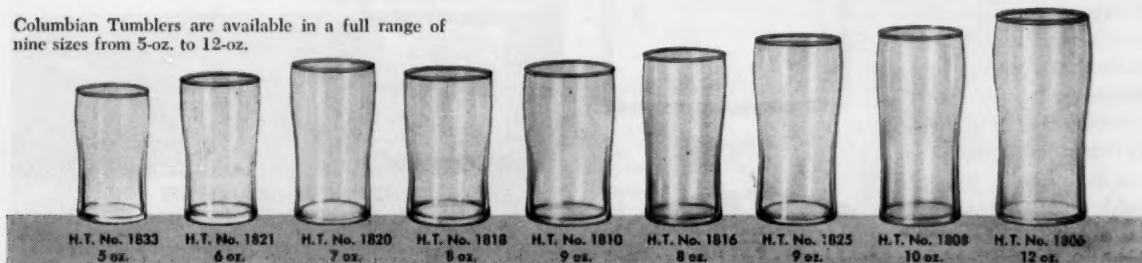
Check the durability and economy of Columbian Tumblers from the Heat-Treated mark on the bottom of every tumbler. Left number shows the year of manufacture, and right designates the quarter.

An audit of Libbey Heat-Treated DATED Glassware in restaurants of 7 major cities showed an average of 1,650 servings per tumbler at a cost of 5.2 cents per thousand servings.

See your Libbey Supply Dealer for details or write to Libbey Glass, Division of Owens-Illinois, Toledo 1, Ohio.



Columbian Tumblers are available in a full range of nine sizes from 5-oz. to 12-oz.



LIBBEY HEAT-TREATED GLASSWARE
AN **®** PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO



John J. Duggan Junior High School,
Springfield, Mass.

perfect performance

Hampden Public Seating!

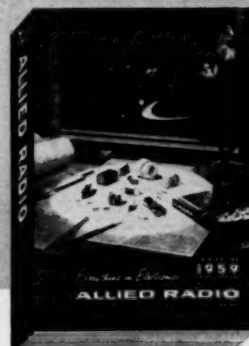
Whatever your specific needs, Hampden builds a chair that does the job best. Wherever people meet, in schools, churches, offices, — Hampden "extras" give you high quality plus high fashion at very low cost. For detailed information on the most complete line of adult and juvenile folding furniture write today direct.



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STRENGTH—rugged "bridge-like" frame, steel rack
EFFICIENT—25% more cutting edges, consistently produce clean, sharp points without waste



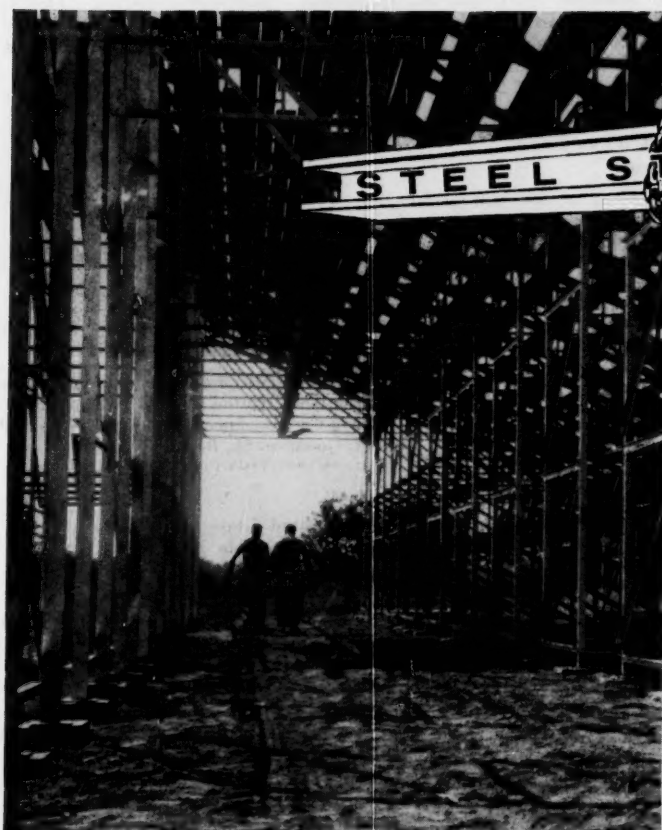
BOSTON RANGER for drawing rooms and heavy duty

- 3 points—outside adjustment
- heavy-duty double bearings for Speed Cutters assure perfectly centered points
- easy-locking stainless receptacle
- takes 6 pencil sizes—no waste

Free comprehensive report on sharpeners
in school, Booklet L

C. HOWARD HUNT
PEN COMPANY
Camden 1, New Jersey





STEEL STANDS ARE...

SAFE

If you want to seat a hundred or many thousands, indoors or out, the *safest plan* is to consult Snyder first.

Snyder Steel Stands and Bleachers are all steel, with the exception of the seats and footboards. They are fabricated of structural-type steel to provide an extra margin of safety and long life and low maintenance costs.

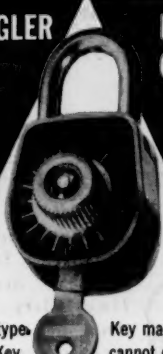
Snyder engineers will gladly help you plan your installations—no matter how large or how small.

For full information write Department A.

SNYDER
TANK CORPORATION
BLEACHER DIVISION
P. O. BOX 14, BUFFALO 5, NEW YORK

GOUGLER

Type No. 40



Unique type Master Key

Key machines cannot duplicate

Gougler Master Key Locks dependably protect privacy of users, yet allow for emergency opening by officials. Thin, modern design. Flat back. The lock that clicks.


Just count the clicks

MASTER KEY COMBINATION LOCKS

New favorites for schools.

ECONOMICAL
CONVENIENT
DURABLE
SECURE
SAFE

GOUGLER KEYLESS COMBINATION LOCK



Type No. 30

Our popular keyless lock. Thousands sold.

Both of these models have die cast cases. All parts are impervious to moisture. You can open them in the dark — just count the clicks.

Write for sample of either lock and factory prices

C. L. GOUGLER KEYLESS LOCK CO.
705-769 Lake St. Dept. 4 Kent, Ohio

Washette ^{by} *Cook*

AMERICA'S LEADING OPEN-END WASHER

- ★ **HEAVY-DUTY STAINLESS STEEL CONSTRUCTION**
- ★ **DEPENDABLE LOW COST PRODUCTION**

CHECK THESE FAMOUS WASHETTE FEATURES!

- ★ Dodge Friction-Free Power Transmission — 2 Year Warranty!
- ★ Heavy-Duty Trouble-Free Master Motor
- ★ Famous One-Dial Control, 28 Formulas
- ★ Water-Gard deletes fill and drain time for formula sequence.
- ★ Easy to Operate — requires minimum maintenance.
- ★ Orders shipped in 48 hours on all standard electric models.



- ★ **EXTRACTORS**
- ★ **WASHERS**
- ★ **TUMBLERS**

The **ONLY** complete line of open end-washers, Cabinet and Pedestal styles, 25, 50, 75 and 100 lb. capacities; Controls: Manual, Semi-Automatic, Automatic; Automatic available with supply injector.

Write for complete information and **FREE** brochures.

Cook Machinery Co., Inc.

4301 S. Fitzhugh Ave. Dallas 10, Texas

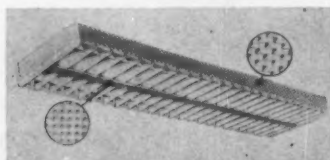
Precision Lathes Have Improved Design

New design features on the line of 10-inch swing Precision Lathes are incorporated into the gear box, carriage, bed and tailstock. The improvements provide greater accuracy, durability and convenience in use. Both bench and floor models are available in several bed lengths and are supplied with either engine lathe or tool-room lathe equipment. **South Bend Lathe, South Bend 22, Ind.**

For more details circle #490 on mailing card.

Richmond Fixture in Popular Priced Series

A new family of fluorescent light fixtures, called The Richmond, is available in a popular priced series. The shallow, straight sided, cleanly styled fixtures permit unusual flexibility of design and application. Models are available in a choice of three different side panels, two different shielding assemblies, and two or four-lamp



units in four or eight-foot lengths. They feature the option of decorative "Texture-Lite" side panels with upward facing lancings in the metal sides for surface interest

and a softly luminous effect. The Richmond series is designed for simplified installation and maintenance. **The Miller Company, Meriden, Conn.**

For more details circle #491 on mailing card.

"Step-Ahead" Floor Finish Resists Marring

"Step-Ahead" is a new self-polishing floor finish containing a chemical developed by the Johnson research department. Known as Polymer-"M", the chemical has small, uniform particles which form a tight, durable protective coating resistant to scuffing, marring, dirt pick-up and rubber marking. An advanced emulsifier system assures self-leveling in the application of the finish as well as easy removal for stripping. "Step-Ahead" reduces maintenance time due to its long-lasting protection with easy care. **S. C. Johnson & Son, Inc., Racine, Wis.**

For more details circle #492 on mailing card.

Portable Phonograph for Audio Instruction

The Audio Instructor, Model PR-10, is a new high fidelity portable phonograph with many applications as an audio instruction aid in schools and colleges. The sturdy, lightweight unit is readily portable for use in classrooms, gymnasiums and auditoriums for teaching or for recreation. It has a peak power output of 10.7 watts which is adequate to handle large auditoriums or other areas without distortion. It

(Continued on page 142)

provides maximum teaching benefits through faithful reproduction of recorded instruction in language, music, literature



and other arts, for all educational levels from kindergarten through college. **Stromberg-Carlson, Special Products Div., 1400 N. Goodman St., Rochester 3, N. Y.**

For more details circle #493 on mailing card.

Graduated Glass Cylinder Has Removable Base

A removable plastic base is used on the new Pyrex brand heat-resistant, graduated glass cylinder designed especially for student use in school laboratories. The hexagonal plastic base prevents the cylinder from rolling when placed on its side. Durable graduations are marked on the cylinder which is calibrated accurately to meet all educational laboratory needs. It is mechanically strong and chemically resistant. **Corning Glass Works, Corning, N.Y.**

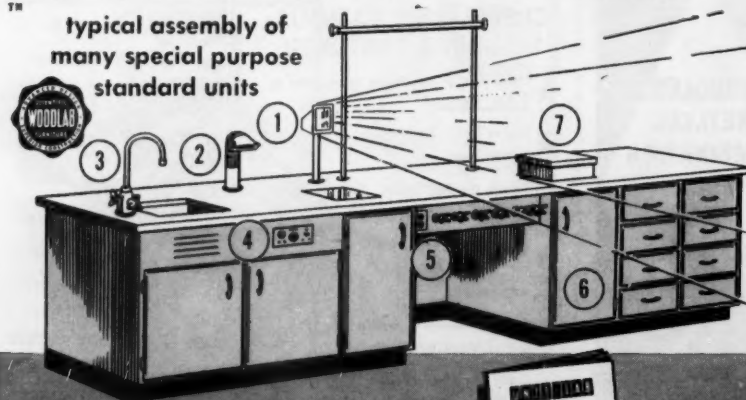
For more details circle #494 on mailing card.

UNIT-LAB a new concept in wood-lab equipment for modern teaching in schools and universities

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typical assembly of many special purpose standard units



It's EASY to SEE. . .

UNIT-LAB

gives you more exclusive features . . . more flexibility . . . and more of everything at lowest cost!



- 1 LAB-VU PROJECTOR
- 2 HIGH VELOCITY FUME EXHAUST
- 3 ACID RESISTING SINK
- 4 LAB-ELECTRIC CONTROL (AC-DC)
- 5 CENTRALIZED SERVICE PANEL
- 6 STORAGE CABINET
- 7 APPARATUS ELEVATOR

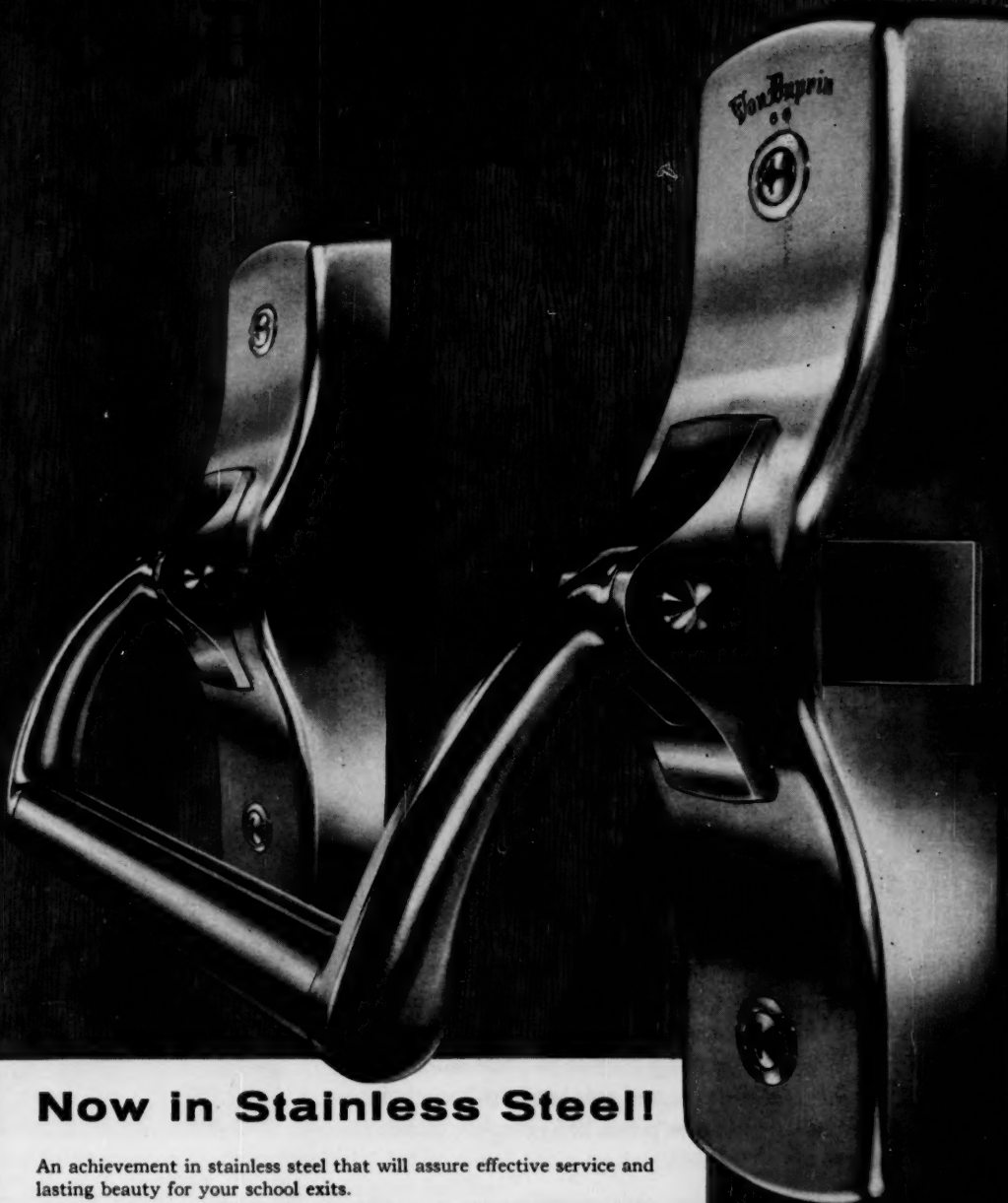


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FREE ENGINEERING SERVICE AVAILABLE

**LABORATORY
FURNITURE
COMPANY INC.**

Since 1920 - Over 50,000 Installations - MINEOLA, LONG ISLAND, NEW YORK, PHONE: PIONEER 3-3400



Now in Stainless Steel!

An achievement in stainless steel that will assure effective service and lasting beauty for your school exits.

Type 66—also available in bronze—is a completely new series in rim, mortise lock and vertical rod models, and features a smart new line of matching outside trims.

For the finest expression of "the safe way out!", ask your architect or hardware consultant for full details on the Von Duprin 66. Or write direct for your copy of Bulletin 581.



VONNEGUT HARDWARE CO. • VON DUPRIN DIVISION
INDIANAPOLIS 9, INDIANA



**Transistorized Audiometer
Is Compact Pocket-Sized Unit**

Completely transistorized and self-powered, the new Maico Pocket Audiometer is a compact hearing test instrument only 6½ inches long. It can be carried in purse or pocket, yet is completely self-contained, requiring no electrical outlet. The unit shuts off automatically when placed in its leather carrying case.

The new Maico screener has the range and accuracy for reliable hearing screening tests and includes a microphone speech communication circuit. It is especially attractive for school testing since it can so easily be carried from room to room. **Maico Electronics, Inc., 21 N. 3rd St., Minneapolis 1, Minn.**

For more details circle #495 on mailing card.

Self-Contained Film Projector Operates in Lighted Room

Satisfactory for use in rooms with up to 40 pupils, the new Busch Super Cineducator is a self-contained 16mm rear projection unit that is readily mobile. It goes easily through doors into classrooms, eliminating the need for a special projection room. It is mounted on large casters and has a cabinet with storage area for film



supplies which may also be used to store other audio-visual equipment such as a record player, amplifier and public address system.

The new Busch Super Cineducator has increased light output with a greatly increased screen size, now 24½ by 33½ inches. It folds accordion fashion to form a cabinet only 25 inches wide for easy access through doors. The Cineducator screen can be used for rear projection of other audio-visual units, such as slide film or filmstrip projectors. **Busch Film & Equipment Co., 214 S. Hamilton St., Saginaw, Mich.**

For more details circle #496 on mailing card.

HAWS

← ONE-PIECE →

FIBERGLASS UNIT

with squared ends for
flush mounting in
continuous counters



DRINKING FOUNTAINS



PANTRY FAUCETS



LABORATORY FAUCETS

For commercial, school, industrial and residential use...

HAWS Series 2800 is a one-piece fiberglass molded unit with integral receptor and deck-top. No cracks or joints for water accumulation. It's specifically designed for simple installation in continuous counters; squared ends butt snugly against adjacent counters. Decks slope to receptor for complete, unhindered drainage.

Fiberglass finish is colorful and durable! You can choose from five decorator colors at no extra cost! Choose your pantry faucet and fountain fixtures, too, from HAWS complete line of facilities for every purpose.

ARCHITECTS, BUILDERS, SCHOOL OFFICIALS... here's an idea worthy of your attention. Write for illustrated literature, today.

HAWS

DRINKING FAUCET COMPANY

1441 FOURTH STREET (Since 1909) BERKELEY 10, CALIFORNIA

Decorative Tack Boards Can Be Stationary or Movable

A geometric design in contrasting colors applied to the vinyl fabric surface of Mura-Tack Boards results in a decorative tack board which takes tacks handily, yet



leaves almost no evidence of tack holes. The new boards are made of sturdy insulation board covered with electronically fused vinyl fabric, forming a practically indestructible surface. They come complete with mahogany frames and are mounted on the face of the wall, making them movable when desired. They can also be supplied without frames for permanent wall installation.

Mura-Tack Boards range in size from four by two to eight by four feet. For larger areas a series of Mura-Tack Boards can be installed in a combination of color, texture and design. They provide excellent boards plus decorative areas on classroom or corridor walls. **Mural Arts, 1424 24th St., N.E., Canton 4, Ohio.**

For more details circle #497 on mailing card.

(Continued on page 144)



... WITH THE MOST COMPLETE SCHOOL ACCOUNTING PLAN

Of course, nobody really punishes an administrator with blackboard assignments.

Nevertheless, he'll save himself a lot of financial headaches with the new Burroughs school accounting plan which incorporates the unparalleled speed and flexibility of Burroughs numerical or typing Sensimatic. And, as ever more students pour into our schools year after year, the need for complete, accurate, instantly available financial data becomes increasingly obvious.

The new Burroughs plan brings complete mechanization of descriptive accounting to school systems. Look at these benefits: Greater productivity with less effort. Improved

accuracy. Smoother work flow. Split-second availability of all the figure-facts you want when you want them.

Even a newly trained operator can race through revenue accounting, budgetary accounting, check writing, payroll, student activity accounting. She can switch from job to job at the flick of a knob.

There's a free booklet about this work- and time-saving plan. You can get your copy by calling our nearby branch office. Or write to Burroughs Division, Burroughs Corporation, Detroit 32, Michigan.



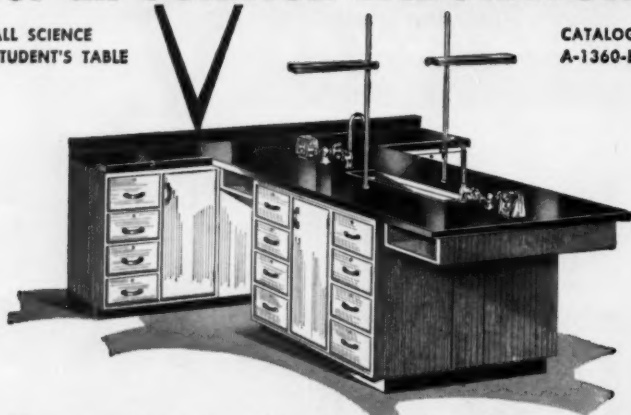
BURROUGHS Sensimatic Accounting Machines

Burroughs and Sensimatic are trademarks.

Quality / FURNITURE for all SCIENCE LABORATORIES

ALL SCIENCE
STUDENT'S TABLE

CATALOG NO.
A-1360-E.C



These new perimeter type tables offer unlimited design possibilities and arrangements from standard interchangeable base units. They provide numerous advantages for new construction design as well as for use in remodeling for Chemistry, Physics, Biology and General Science laboratories. Our representative engineer will be pleased to discuss your requirements and show you the entire line of Peterson furniture that has been the choice of leading educators and industrial furniture users for more than 65 years.

Write Dept. 1226 for Brochure Number 12. It's Free.

LEONARD PETERSON & CO., INC.

1222 FULLERTON AVENUE, CHICAGO 14, ILLINOIS



QUALITY . . . ECONOMY . . . DURABILITY

in these performance-proven towels!

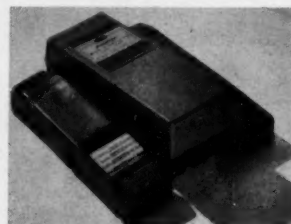
McArthur's performance-proven Super-Gym and Super-Turk School Towels offer you longer service plus reduced cost. They're a full 20" x 40" shrunk size . . . with heavy woven tape selvage edges . . . and, woven of the best long staple, triple-twisted, two-ply warp yarns! Good for 350 to 500 launderings . . . and serviceability like this means lower cost-per-use to you! Write now for complete information on McArthur's economical School Towel Plan and free towel repair service. They're your best buy in school towels . . . they're McArthur Towels!

GEO. McARTHUR & SONS, INC.
BARABOO, WIS.

New York State Representative: Vern Volland, 19 Fairchild Drive, Eggertsville 21, N.Y.

Movie Splicer for 8 or 16mm Film

The new Kodak Prestape Movie Splicer makes quick, dry and inter-locking splices on 8 or 16mm movie film. The dry splicer cuts a unique notched section out of one frame to be spliced and a corresponding section out of the other. The two pieces of film are fitted together, and the perforated



Kodak Prestape is placed adhesive side on the film. In moments, the splice is secure and the film ready for showing. Two finger hooks on the splicer anchor each piece of film in position and they can be placed to ensure sprocket holes staying in register. Eastman Kodak Co., Rochester 4, N.Y.

For more details circle #498 on mailing card.

Oval-Shaped Tubing Strengthens Nissen Trampolines

Reduced weight and added strength and rigidity in the frame are advantages accruing from the new oval-shaped steel tubing now used in the fabrication of all Nissen Regulation Trampolines. The new tubing was developed by Nissen's Bouncing Engineers and gives the frame a neat modern look which permits the protective frame pads to lie flat. The lighter frame facilitates folding and unfolding. Nissen Trampoline Co., 215 A Ave., N.W., Cedar Rapids, Iowa.

For more details circle #499 on mailing card.

Style-Line Desks and Tables Have Stainless Steel Edges

Top edges of stainless steel embossed and with a satin finish to blend with the brushed aluminum drawer handles are incorporated into the new Style-Line steel desks and tables. Other features of the



line include perforated back panels stamped in a cane pattern from 20 gauge steel for improved ventilation with adequate screening, and cast aluminum contour legs. The edges are permanently welded to the desk or table and are tarnishproof. The contour legs are interchangeable with Bentson standard island or cone types, and permit full height adjustment from 29 to 30½ inches. The Bentson Mfg. Co., Aurora, Ill.

For more details circle #500 on mailing card.

(Continued on page 146)



Replace the "slip" cover on your floor with Holcomb SAFE-T-SHEEN



Now, you don't need to sacrifice beautiful floor finish for safety. Get *both* with SAFE-T-SHEEN . . . the anti-slip, no-wax floor finish for composition tile and other floor coverings. It dries to a rich velvety gloss without buffing.

Easy to apply—fast to dry . . . SAFE-T-SHEEN floor finish wears ON where others wear off. It is highly water resistant, completely colorless, completely transparent. Long-lasting SAFE-T-SHEEN cuts maintenance costs—no constant refinishing required. Periodic dry cleaning removes surface

dirt and scuff marks—brings up the gloss.

Approved by Underwriter's Laboratories and Rubber Manufacturers' Association. Ask your Holcombman for a demonstration. See *why* SAFE-T-SHEEN is your safest buy for lasting floor beauty.

HOLCOMB
Scientific
CLEANING MATERIALS



See your Holcombman, the "shirt-sleeve" expert on cost-cutting cleaning methods ▶

J. I. HOLCOMB MFG. CO., INC. • 1601 BARTH AVENUE • INDIANAPOLIS, INDIANA
Hackensack • Dallas • Los Angeles • Toronto

Floor Polisher Is Economically Priced

Designed for small and medium sized floor area maintenance, the new Model PRO-13 floor polisher is a medium weight machine available at an economical price. It has a powerful motor and interchangeable brush attachments for scrubbing, polishing, buffing and steel wooling all types of floors. Hild Floor Machine Co., Inc., 1217 W. Washington Blvd., Chicago 7.

For more details circle #501 on mailing card.

Vision Tester Is Precision Instrument

The New York School Vision Tester is a speedy, reliable and practical instrument



for measuring the vision performance of school children. It is designed to incorporate the basic requirements of good testing developed at Purdue University and the University of Chicago and is practical and easy to operate. The complete

battery of vision tests can be administered in less than two minutes. Test distances are produced optically and are precise and constant. Life-long lamps provide a constant source of light and external light is excluded. The instrument can be used by children whether they know the alphabet or not. Bausch & Lomb Optical Co., 535 St. Paul St., Rochester 2, N. Y.

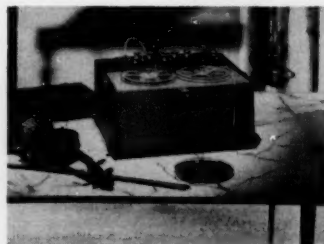
For more details circle #502 on mailing card.

Hot Chocolate Mix in Liquid Form

Liquid Hot Chocolate Mix is a new product in thick, syrup form containing chocolate, milk and sugar. It produces a thoroughly dissolved cup of hot chocolate with the addition of hot water. The mix is carefully homogenized and packaged in glass jars in two sizes. Continental Coffee Co., 2550 Clybourn Ave., Chicago 14.

For more details circle #503 on mailing card.

recording is made, the operator presses a button on the A-V Control Center which provides the impulse to the projector which changes the slide. With the Ekotape 310, scripts accompanying films, or



special scripts can be transcribed on tape and through the A-V Control Center they can be timed for slide changes. Webster Electric Co., Racine, Wis.

For more details circle #504 on mailing card.

Waste Receptacle Formed With Round Drum Top

Any hundred pound grease drum or similar round container can be converted into a self-closing waste receptacle with the new Model 62 Bennett Bilt Round Drum Top. Made of heavy gauge treated steel with special outdoor baked enamel finish, the Model 62 is protected by a rubber gasket for silent door action with no sharp edges and the self-closing top has gentle spring action. Bennett Mfg. Co., Inc., Alden, N. Y.

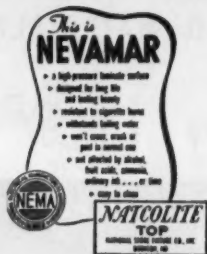
For more details circle #505 on mailing card.

(Continued on page 148)

MULTI-PURPOSE CABINETS by NATIONAL



Surfaced
Inside And
Out With
NEVAMAR
High-Pressure
Laminates



The NATIONAL line offers every cabinet need for today's classroom, in both fixed and mobile units. These cabinets are completely interchangeable . . . can be quickly rearranged to meet every situation. Each unit is surfaced inside and out with NEVAMAR — the super-smooth lifetime laminate that resists scars, stains, scratches . . . never needs re-finishing and eliminates maintenance costs. Write for complete catalog of National School Furniture.

NATIONAL SCHOOL FURNITURE COMPANY

Div. of National Store Fixture Co., Inc. • ODENTON, MARYLAND



JOHN MORROW SCHOOL • Architect: H. L. Heilman, Board of Education, Pittsburgh, Pa.
Natco "6T" and "8W" Series and Natco Stairtread Tile

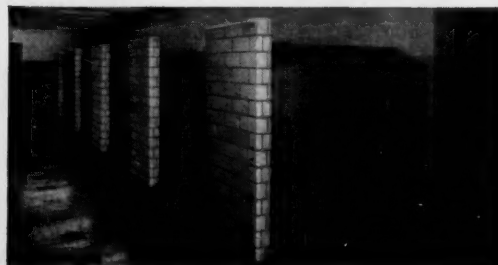
Designed for double duty...

Natco Ceramic Glaze Vitritile features twofold flexibility

for functional and visual expression
in modern architecture

Attractive from any angle—Natco Vitritile is easily adapted to a variety of interior designs. It offers the architect a versatility of form and a wide range of colors and bonding techniques which help him to develop imaginative treatments at economical costs. *And*, Natco Vitritile's durable ceramic glaze finish lasts for the life of the building.

Functional, load bearing beauty—pre-engineered for co-ordinated design. Natco Vitritile provides both structural strength and durable interior finishes *in a single unit . . . placed in just one operation*. It is available in a full line of shapes and sizes for walls and partitions, or in "soaps" for facings and veneers. Consult your nearest Natco branch office for complete details.



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Structo School Changes Permit Flexible Planning



Changes made in the design and components of Structo Schools have resulted in considerably increased flexibility of

planning and added economy in construction. The colorful all-steel modular schools, utilizing the curtain wall technic of construction, are now available with baked enamel as well as porcelainized steel interior panels, both of which are practically maintenance-free.

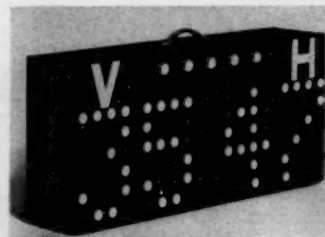
Some changes have been made in interior construction and in panel sizes, resulting in superior buildings. With the use of standard as well as long span bar joists, these changes give more flexibility in laying out a Structo school and classrooms can be designed to any length or width in multiples of four feet. Hot water, forced warm air or electric heating systems can

be installed in the structures. All of the other advantages of time and labor savings in planning and construction offered originally by Structo Schools are included in the improved units. **Structo Schools Corp., 1 State St., Boston 9, Mass.**

For more details circle #506 on mailing card.

Electric Scoreboard Is Readily Portable

The Sportsmaster is a new electric scoreboard which requires no installation and is fully portable. It is economical in price, 24½ by 10½ inches in size, five inches deep, and weighs but 16 pounds. A new plastic lens makes the board readable at angles and at distances up to 200



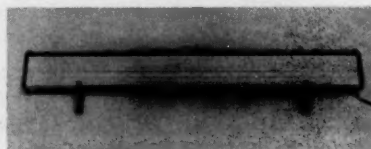
feet. A timer with an eight-inch dial which plugs into the Sportsmaster is available as an accessory.

The Sportsmaster is specifically designed for scoring intramural contests of every type, indoors or out, but can be used for varsity scrimmages, and in conjunction with large boards to register fouls. It has two sets of numbergrams for score keeping and there are five indicator lights for registering the period or individual fouls. **M. D. Brown Co., 2207 Lake St., Niles, Mich.**

For more details circle #507 on mailing card.

Arielite Blackliter for Dramatic Effects

School and classroom production can be given dramatic effects economically by using the new Arielite Blacklite unit. The self-contained unit provides black light from a 40-watt fluorescent lamp of special filter glass that absorbs practically all visible light and transmits a high percentage of near-ultra violet light. The filter tube makes external filters unnecessary. The



strong, lightweight extruded aluminum fixture provides wide-angle illumination vertically and horizontally. The lamp burns approximately 7500 hours and can be turned on or off without a warm-up or cool-off period, giving immediate response. The BLB fluorescent lamp black light source emits very little visible light, is cool burning and the linear form ensures even and efficient light distribution. **Ariel Davis Mfg. Co., 3687 S. State St., Salt Lake City, Utah.**

For more details circle #508 on mailing card.

(Continued on page 150)

25¢

per pupil
per year!



A check made in ten different school systems located in one state — all using Mosinee Turn-Towl service — revealed the cost of providing washroom towel service was less than 25¢ per pupil per year.

Surveys show that where non-controlled service with a lower quality towel than Turn-Towls is used, the cost of similar service runs between 30¢ and 55¢ per pupil per year. Good reason for using Turn-Towls.

Find out how Turn-Towls can improve your washroom towel service. Send coupon below for more information.



BAY WEST PAPER COMPANY

1106 West Mason St., Green Bay, Wis.

Please send me the free Turn-Towl Kit with complete information on Turn-Towl Service.

Name

Firm

Address

City..... Zone..... State.....



ASE SCHOOL FURNITURE

*Serves better . . .
lasts longer*

Modern ASE school furniture and lockers are quality built to last longer. They give superior and lasting service through years of hard use. Protective Bonderite coating anchors paint to metal . . . assures a permanent, handsome finish. Choice of nine modern colors, top materials of linoleum, Textolite or Formica. Write now for more information or call your ASE dealer.

*ASE Offers a Complete Line of Fine
School Furniture*

DESKS • CHAIRS • L-UNITS • TABLES • CREDENZAS
BOOKCASES • FILING CABINETS • LOCKERS
STORAGE CABINETS • BLUEPRINT FILES



See your nearest dealer or write for information



ALL-STEEL EQUIPMENT INC. Aurora, Illinois

Heavy-Duty Floor Seal for Entrance Corridors

School areas with especially heavy traffic, such as entrance corridors, can be given long-lasting floor protection with the new Tennant No. 15 Heavy-Duty Floor Seal. Under development and testing for five years, the new seal provides a light, semi-lustrous film that does not darken with age. It has high resistance to rubber and friction burns, abrasion, moisture and dirt penetration. **G. H. Tennant Co., 721 N. Lilac Drive, Minneapolis 22, Minn.**

For more details circle #509 on mailing card.

Multiple Unit Drawing Table Fits Any Need



Designed to fit the varying needs of classes, the new Multiple Unit Drawing Table may be purchased simply as a table with a permanently sloping top, or with

insert units which are interchangeable. Units include drawers and drawing board storage areas which may be mounted in front or in the back.

The table top is 36 by 36 inches in size, ¾ inch thick birch plywood with a front pencil ledge. The frame of solid maple and birch construction is finished in natural lacquer and drawers have master-keyed cylinder locks. The unit is suitable for use in any classroom requiring angle top work areas. **Brodhead-Garrett Co., 4560 E. 71st St., Cleveland 5, Ohio.**

For more details circle #510 on mailing card.

Vulca-Dek Roofing System Cuts Time and Costs

The Vulca-Dek Re-Roofing System is a new cold process built-up roofing method that "vulcanizes" a new roof over the old roof surface. Time, labor and costs of removal of the old roof are saved. The new system is quick and simple in installation. **The Monroe Co., Inc., 10703 Quebec Ave., Cleveland 6, Ohio.**

For more details circle #511 on mailing card.

Rol-Away Chair Cart Features Rol-Guide Wheel

A rigid, retractable extra wheel known as the Rol-Guide is mounted under the center of the new Rol-Away chair carts. The Rol-Guide wheel is retracted for maneuvering the cart on its four corner swivel wheels. When the foot lever locks the Rol-Guide into position, the fifth wheel is

(Continued on page 152)

held in tight contact with the floor by spring tension, permitting the movement of the cart in a completely controlled line of travel. The chair cart will accommo-



date folding chairs of any make and in widths from 15 to 18 inches. The cart rolls silently without marring polished floors. **Rol-Away Truck Mfg. Co., Inc., 6143 S. E. Foster Rd., Portland 6, Ore.**

For more details circle #512 on mailing card.

Lemon Flavor Wedge in Portion Package

Portion control of lemon in food and beverage service in institutions is now possible with the new Lemonwedge package. Crushed crystals of pure lemon flavor are enclosed in a small handy single-service foil package which opens easily. Crystals dissolve instantly when used in beverages and on foods. **Unit-Packet Corp., Dept. D, Wilmington, Mass.**

For more details circle #513 on mailing card.

Accepted Procedure ...



against
**Athlete's
foot**
with modern
DOLGE Fungicides

DUSTING Alta-Co Foot Powder on the feet and inside shoes

FOOT BATH Alta-Co Powder dissolved in water for group prophylaxis

FLOOR WASH H.D. Fungicide diluted in 300 parts water—mop on floor

Write for Booklet
on Athlete's Foot Control



How To Trim Food Service Expenses in the Face of Rising Costs



KLENZADE

KLENZADE TAILOR-MADE COMPLETE SANITATION PROGRAMS

Qualified Klenzade Technicians will make a complete survey of your food operation and set up sanitation procedures and schedules to meet your particular conditions. Klenzade will teach your kitchen personnel to "keep it clean . . . and keep it longer." Why not take advantage of this unique Klenzade service that adds new zest to your food, cuts costs, and freshens up your entire food facilities.

**What
You Get!**

Sparkling equipment, dishes, glasses, utensils. "Out-of-doors" atmosphere, free of "scullery" odors. Fresh clean food flavors — smiles instead of complaints. Elimination of detergent waste, over-use, duplicated products, inefficient cleaning.

Write for Information on Complete Sanitation Survey

KLENZADE PRODUCTS, INC.
BELOIT, WISCONSIN

Visit Us—American Dietetic Show



**For safer floors
with beauty
that lasts ...**

**Use quality floor waxes containing
Du Pont's anti-slip ingredient**

LUDOX[®]

COLLOIDAL SILICA



REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

You benefit two ways with floor wax containing "Ludox". First, there's the skid resistance "Ludox" adds. Tiny, transparent spheres of "Ludox" exert a snubbing action with every footstep ... give sure-footed traction. Second, you get the lasting beauty only a fine wax can give your floors ... and it's easy to *keep* floors beautiful, because scratches and scuffs can be buffed out, without rewaxing.

Floor waxes containing "Ludox", Du Pont's anti-slip ingredient, give your floors the appearance you want, plus added safety underfoot. Mail coupon below for more information and a list of suppliers for products containing "Ludox". E. I. du Pont de Nemours & Co. (Inc.), Grasselli Chemicals Department, Room N-2533, Wilmington 98, Delaware.

MAIL THIS COUPON TODAY

**DOUBLE-ACTION RUG AND UPHOLSTERY
SHAMPOOS—A NEW USE FOR LUDOX[®]**

New shampoos containing "Ludox" *clean and treat* rugs against resoiling in just one application. "Ludox" fills microscopic fiber crevices ... protects surface so dust and dry dirt don't cling. Dirt stays on surface for easy removal.

I'm also interested in:
☐ Names of suppliers of anti-slip floor waxes containing "Ludox".
☐ More information about double-action rug and upholstery shampoos containing "Ludox".

E. I. du Pont de Nemours & Co. (Inc.)
Grasselli Chemicals Department, Room N-2533NS
Wilmington 98, Delaware

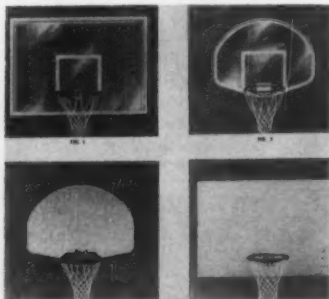
Please send me the free booklet describing the advantages of using floor wax containing "Ludox."

Name _____ Title _____
Firm _____
Address _____
City _____ State _____



Basketball Backstops in Nine Models

Six different mounting arrangements are possible with the new line of Wayne Basketball Backstops. There are nine models



with four different backboards available for each model. Mounting arrangements include wall-mounted backstops, including stationary, fold-up and gate types; ceiling-mounted styles, fold up and stationary wall-braced and permanent outdoor steel pipe-mounted models.

The four backboard styles in the backstops include tempered plate glass in both rectangular and fan shapes, steel fan-shaped and plywood rectangular-shaped. Goals have official size 18-inch rings of 1/2 inch diameter steel. "No-tie" net holders on the under side of the ring eliminate tying. Wayne Iron Works, 147 N. Pembroke Ave., Wayne, Pa.

For more details circle #514 on mailing card.

Texture-Chip Design in Vinyl-Asbestos Flooring

The Imperial series in Excelon Tile has a texture-chip design that extends entirely through the thickness of the vinyl-asbestos flooring. No amount of traffic or other wear can remove the non-directional graining design in the new flooring. Eight patterns are available in the new styling, each pattern having various tones of the basic coloring scattered through the flooring. The new tile is constructed to withstand the effects of spilled materials and resists grease, alkali and dilute acids, making it suitable for use even in laboratories, kitchens and dining areas. **Armstrong Cork Co., Lancaster, Pa.**

For more details circle #515 on mailing card.

Vallen Curtain Track Is Aluminum Unit

Designed for use for all types of visual room darkening, partitioning and windows, the new Vallen curtain track can be recessed, mounted flush or suspended. It is a completely new type track with channels treated for protection against wet plaster. All operating parts can be easily installed after plastering. The curtain carriers have adjustable swivels to prevent twisting, binding or fouling, and the operating cord is concealed. The Vallen 175 Recess Track can be used with a Vallen Electric Window Track Operator or it can be operated manually. **Vallen, Inc., Akron 4, Ohio.**

For more details circle #516 on mailing card.

(Continued on page 156)

Outdoor Areas Cleaned With Vacuum Sweeper

Lawns, athletic fields, parking lots, sidewalks and other outdoor areas can be effectively cleaned with the new Mulch-Vac heavy duty vacuum sweeper. Leaves are thoroughly mulched into fine natural fertilizer for discharge back on the lawn. Litter is also chopped into fine particles so that the vacuum bag holds maximum quantities and needs infrequent emptying.

The Mulch-Vac sweeper is self-propelled. A towed-type extra heavy duty model that sweeps a path six feet five inches wide is also available. The vacuum is strong enough to pick up even wet and



trampled leaves, boxes and other litter and the machine may be used on any surface. **Good Roads Machinery Corp., Minerva, Ohio.**

For more details circle #517 on mailing card.

NEW! SCIENCE KIT LAB



- ample shelf and drawer storage
- Pegboard storage panels
- stainless steel sink, apparatus supports, electric connections
- large easy-moving casters with individual brakes; bar handle
- sturdy well-built maple cabinet; chemically resistant top

Science Kit (originator of portable Science Kits for elementary science teaching) has developed this movable science laboratory unit for elementary and junior high schools.

\$279.00, included.

The necessary apparatus — of the finest quality and specifically designed for storage in the Science Kit Lab — is available at low cost.

Write for circular

SCIENCE KIT LAB CORP.

Box 69

Tonawanda, N.Y.

Serving Educators Since 1939

FREE! SCIENCE TEACHING AIDS

From **CENCO**, for secondary teachers... pamphlets listing apparatus and supplies needed for demonstrations and experiments in science courses.

- Pamphlet G56 General Science
- Pamphlet B8R2 Biology
- Pamphlet HSC-7 Chemistry
- Pamphlet P-12 (54 pgs.) Physics
- Pamphlet DMW Physics Workbook Experiments
- Pamphlet DMB Demonstration of Physical Laws

Write today listing pamphlets desired.

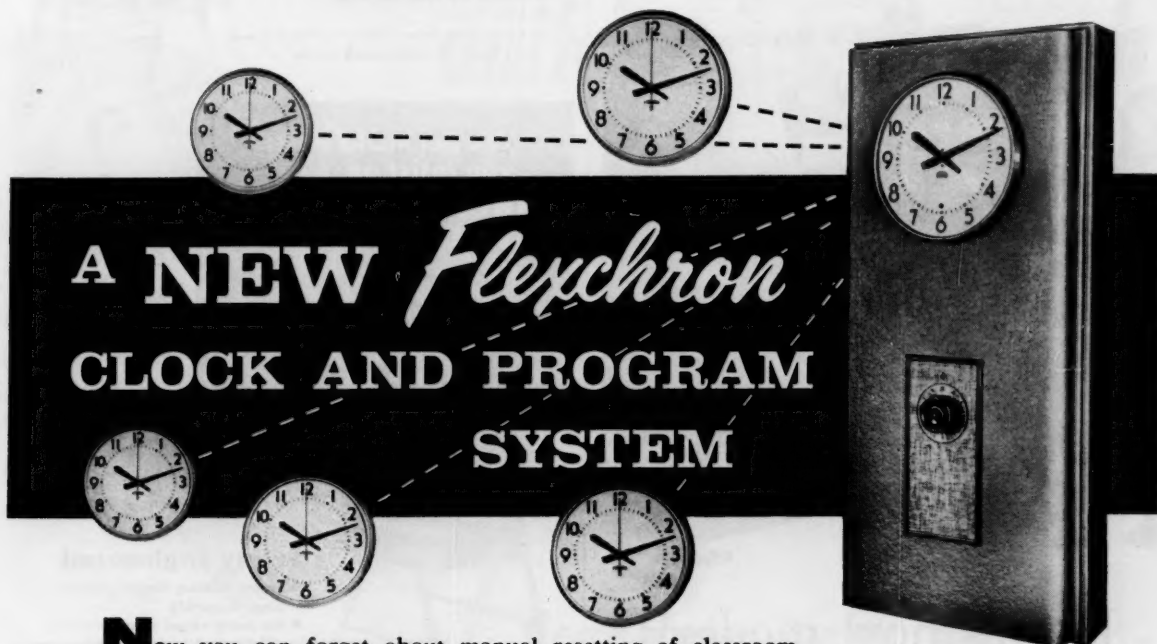
CENCO the most complete line of scientific instruments and laboratory supplies in the world.



CENTRAL SCIENTIFIC CO.

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Boston • Birmingham • Santa Clara • Los Angeles • Tulsa
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FROM **STANDARD** ...THE LEADER



Now you can forget about manual resetting of classroom clocks. The new Flexchron[®] System automatically resets all secondary clocks after power interruptions of any duration—whether for 10 minutes or ten hours.

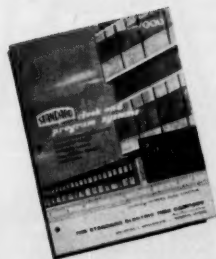
When a power failure occurs, the Master Clock & Program Controller keeps running on a built-in power reserve in which no batteries are used. When electric service is restored, program signals sound on schedule and all secondary clocks are automatically reset. And since each secondary clock has its own resetting mechanism (under control of the Master Clock) all clocks are synchronized to the exact same time, including the sweep second hand.

These are important advantages you get with the new Flexchron[®] System—by Standard—that other systems cannot provide. And in addition you get such time-tested features as:

“MEMORY TAPE” PROGRAM CONTROL
SIMPLICITY OF PROGRAM SCHEDULING
FLEXIBILITY OF PROGRAM SELECTION

These are all important features born of long experience—almost 75 years of it—in the clock system field.

Send today for your copy of Standard's new and complete Clock Systems Catalog. Ask for Publication #245.



THE STANDARD ELECTRIC TIME COMPANY

89 LOGAN STREET
SPRINGFIELD, MASSACHUSETTS



Travelling Display—
Watch for showing
in your area. See
complete STAND-
ARD Systems in
operation.

ALSO MANUFACTURERS OF:



Emergency
Lighting Equipment



Laboratory
Panels



Hospital Signalling
Equipment



Analogue
Computers



Precision
Timers



Here's how modern schools speed up lunchroom lines

*Serve "milk-only" pupils separately . . .
with a Norris Automatic Milk Vender*

Pupils who want only milk slow down your lunchroom line. Solution: Serve your "milk-only" pupils quickly with a Norris Automatic Milk Vender placed away from the regular line. Result: Your entire lunchroom operation is speeded up.

For after-hours milk service, plug the Norris Vender in and refreshing, healthful milk becomes available anywhere, any time.

To save teachers' time, install the Norris Milk Vender and end faculty milk-program bookkeeping. The Norris Vender collects its own money, makes its own change—automatically.

Any child can operate the Norris Vender without error. It's the simplest milk vender built. There's a separate coin channel for each of three drinks. In goes the coin—out comes the carton or bottle automatically. No selector buttons, no dials, no levers. Write today for new FREE folder, including the name of your regular dairy, please.



Norris Automatic Vender

Write to: Norris Dispensers, Inc., Dept. NS 78, Vending Division, 2720 Lyndale Ave. So., Minneapolis 8, Minn.
Canadian Distributors:
Thermomatic Merchandisers, Ltd., Toronto, Canada

Incomparable Comfort

- Large, comfortable, contour shaped seats — 15 1/2" wide x 16" deep
- Deep, curved, correct posture backrests for full back support
- Ample hip room between side frames
- Extra thick foam rubber cushioned seat on No. 103 upholstered model



NO. 101

**You get MORE when you insist on
KRUEGER TUBULAR STEEL CHAIRS**

MORE STYLES
IN EVERY PRICE RANGE
MORE STRUCTURAL FEATURES
OF IMPORTANCE
MORE SEATING VALUE
FOR YOUR DOLLAR



NO. 102



NO. 103

Safety Engineered

- Safety folding hinges prevent finger pinching
- No sharp edges — all are fully roll-beaded to prevent injury
- Non-tipping Y-type design permits unbalanced sitting — well forward or far back on seat
- Chairs cannot accidentally collapse

Built to Last for Years

- Heavy 18-gauge electrically seam welded tubular frames
- Built-up seat-spacers for stronger pivot rod weight bearing points
- Tubular leg stretchers and frame braces — solid pivot rods
- L-shaped steel cross brace beneath seat for added support



NO. 81



NO. 82

WRITE FOR NEW
GENERAL
COMPLETE
LINE CATALOG



Demountable

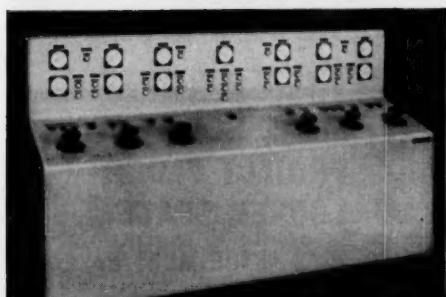
CHAIR TRUCKS

Seven standard sizes hold both X-type channel or Y-type tubular chairs — upright or horizontal. Regular or under-stage models. Demountable ends and exclusive changle frames permit stacking empty trucks one on the other.

KRUEGER

METAL PRODUCTS • GREEN BAY • WISCONSIN

NOW... color and decoration uniform all through



A triumph of electronic automation

This great new tile is made on an entirely new, ultra-modern production line controlled *throughout* by a tremendous electronic master-board especially designed for Congoleum-Nairn by GE automation experts. This means such absolutely accurate control that an entirely new standard of precision and uniformity is achieved in color, size, texture, gauge and strength . . . with maximum dirt resistance and gloss.



Congoleum-Nairn
FINE FLOORS

SPECIFICATIONS

ASPHALT—Size: 9" x 9" and 12" x 12"—
Gauges: $\frac{1}{8}$ " and $\frac{3}{16}$ "—Colors: 17
VINYLBEST—Size: 9" x 9"—Gauge and
Color: $\frac{1}{8}$ "—15 Colors; $\frac{1}{16}$ "—13 Colors
APPLICATION—On, Above and Below Grade

Congoleum-Nairn ends pat- tern wear in Vinyl Asbestos and Asphalt Tile flooring!

The tile photographed above reveals, by a special test, the most important improvement in this type of flooring since the invention of vinyl asbestos itself. A portion has been "peeled" up to show the center, proving that THE STRIATION IS JUST AS STRONG THROUGHOUT (RIGHT TO THE BOTTOM) AS AT THE TOP!

This means that when you install Congoleum-Nairn's sensational new Asphalt and Vinylbest Tile, with FEATHERVEINING Thru and Thru, your floor will never develop any areas where the pattern has been worn off—as in traffic lanes and near doors—nor show pattern differences from area to area.

No matter how far you wear down this new Congoleum-Nairn tile, the intensity and distribution of the pattern never varies—can't be worn off!

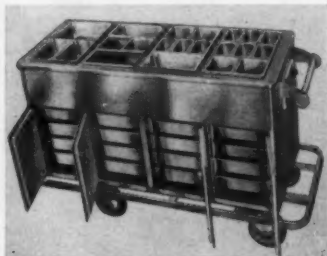
And this is all guaranteed by the famous Congoleum-Nairn warranty—"Satisfaction guaranteed or your money back."

There is no extra cost for this new, tremendously better Congoleum-Nairn tile.

Write Architect's Service Bureau, Congoleum-Nairn Inc., Kearny, N. J. for technical data and samples of Congoleum-Nairn Asphalt and Vinylbest Tile with FEATHERVEINING.

Serv-Mobile Food Units Available in Varying Sizes

The Ideal Serv-Mobile "4" illustrated is one of a line of newly-designed mobile hot and cold serving units for varying food requirements. In addition to the "4," with four top sections and four storage areas, the Serv-Mobile is also available with two or three sections to serve varying numbers. It is designed for central food prepara-



tion for loading at the preparation area and to transport large quantities of bulk food while maintaining proper serving temperatures of both hot and cold items. At the same time, it provides a serving unit at the feeding area. The Serv-Mobile is adaptable to any menu or combination of food items as separate control switches permit use of wells and compartments for hot or cold foods. The units are constructed of stainless steel and bumper assembly and rubber tired wheels make them easy to handle. The Swartzbaugh Mfg. Co., Murfreesboro, Tenn.

For more details circle #518 on mailing card.

Literature and Services

• Administrators, principals and other school executives, as well as coaches and athletic directors, may now have copies of the Sports Calendar prepared by Master Lock Co., Dept. J, Milwaukee 45, Wis. The calendar has been redesigned to correspond to the school year, running from September through June. The new 1958-1959 Calendar provides ample space for listing important events.

For more details circle #519 on mailing card.

• The many exclusive features of Strong Spotlights are discussed in a new brochure entitled "A Strong Spot Is the Best Spot." Released by The Strong Electric Corp., 87 City Park Ave., Toledo 1, Ohio, the brochure discusses the best utilization of spotlights in schools, auditoriums and stadiums, and gives full descriptive information on both incandescent and carbon arc type spotlights, with recommendations as to the proper application of each.

For more details circle #520 on mailing card.

• Welch Mathematics Instruments and Supplies for the mathematics laboratory are the subject of a new catalog from W. M. Welch Scientific Co., 1515 Sedgwick St., Chicago 10. The 44-page booklet describes and illustrates geometry devices, slide rules, metric and function charts, measuring devices, drawing materials, chalkboard instruments, geometry models and projectors and filmstrips.

For more details circle #521 on mailing card.

(Continued on page 158)

• Two instruction manuals for Underwood bookkeeping machines are available from the Business Education Division, Underwood Corporation, 1 Park Ave., New York 16. The new "Bookkeeping Machine Instruction Manual" is designed for an elementary course on the Underwood Sundstrand Post-Master "81" and "92" accounting machines and is supplementary to the Ten-Key Instruction Manual issued in 1957.

For more details circle #522 on mailing card.

• The various aspects of sanitation and odor control for maximum efficiency are discussed in a new brochure entitled "Give Your School a New 'A.'" Written for the administrator, the publication carries a check list of problem areas in a typical school with the cause of the problems, and an explanation of the Airkem System of School Maintenance. The brochure is available from Airkem, Inc., 241 E. 44th St., New York 17.

For more details circle #523 on mailing card.

• An 84-page, 2-color catalog on its new line of wood laboratory equipment is now available from the Metalab-Labcraft Division of Norbute Corp., 224 Duffy Ave., Hicksville, L. I., N. Y. The catalog is primarily designed for educational equipment and is sectionally divided according to types of material. A special feature in the catalog covers laboratory planning with suggested layouts and roughing-in diagrams.

For more details circle #524 on mailing card.

It's so-o easy!

WITH **HUSSEY**
CLOSED DECK
"ROLL-OUT" GYM SEATS

HOW TO CUT CLEANING COSTS

Hussey Closed Deck Roll-Outs are easier and quicker to clean. A thorough cleaning job can be done in approximately 25% less time than it takes for an open deck type of installation. And most important, Hussey Roll-Outs can be closed without first sweeping the floor under them.

Write for FREE catalog.
Hussey Mfg. Co., Inc. 5820 R.R. Ave. No. Berwick, Mo.

50% MORE HORIZONTAL PROJECT FLOOR LOCKER SPACE

WITH TOLCO'S "STOR-MOR" BASE

MODEL TM-12 FA

Tolco's "Stor-Mor" features exclusive steel splined tops of 100% laminated Northern hard maple. Twelve individual heavy gauge steel lockers—6 each side—ball point fasteners and mating pulls and lugs for padlocks. Available in baked green or gray enamel.

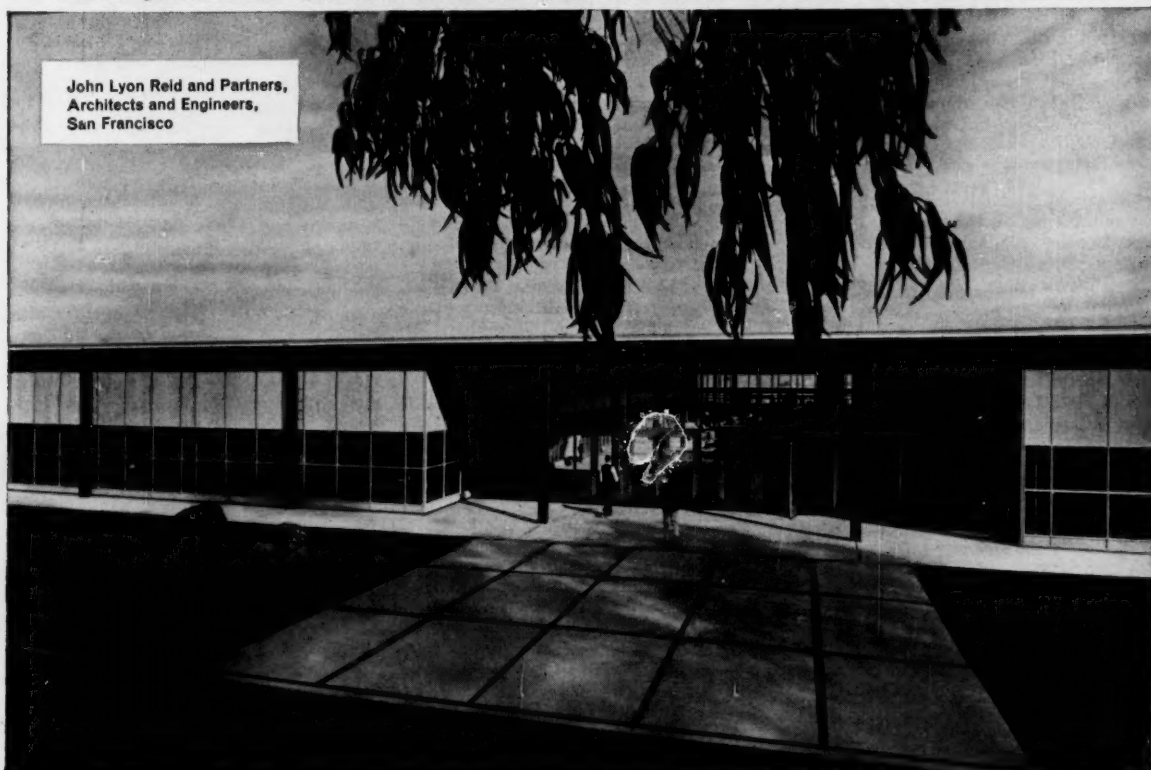
TOLERTON MAKES A COMPLETE LINE OF 2 AND 4 STUDENT BENCHES

No. TS-0A No. TS-02504

ESTABLISHED 1894
THE TOLERTON COMPANY
265 N. FREEDOM AVE. • ALLIANCE, OHIO

A continuing series of outstanding schools, churches, office buildings, hospitals and industrial structures using NORTON DOOR CLOSERS.

John Lyon Reid and Partners,
Architects and Engineers,
San Francisco



PACE-SETTER IN MODERN SCHOOL PLANNING USES NORTON DOOR CLOSERS EXCLUSIVELY

Hillsdale High School, San Mateo, California

In planning this outstanding school, the architect looked far ahead to possible future needs. As a result, it will not soon be outmoded either in appearance or in practical provisions for the ever-changing requirements of new courses and new methods of instruction. It looks to the future, too, in every item of equipment, including door closers.

Standard throughout are dependable Norton Surface Mounted Door Closers...up-to-date versions of the sturdy Norton Closers still in daily use after serving continuously up to 30 years and longer in some of America's most famous public buildings. For fully illustrated data on these and other models, consult the current Norton catalog. Write for it today.



A complete line of Norton Surface-type Closers is available for installations where concealment is not essential.



NORTON®
DOOR CLOSERS
Dept. NS-98 • Berrien Springs, Michigan

• "What You Should Know About the \$500,000,000 Stockpile of Teaching Films to Help America Win the Educational Race" is the title of a pamphlet prepared as a public service for school administrators and their department heads by, and available from Victor Animatograph Corp., a Division of the Kalart Co., Plainville, Conn.

For more details circle #525 on mailing card.

• "Allegheny Stainless in Food Preparation and Serving" is the title of a new 44-page booklet available from Allegheny Ludlum Steel Corp., Public Relations Dept., Oliver Bldg., Pittsburgh 22, Pa. Complete information on food preparation and serving equipment used in educational and other institutions is included.

For more details circle #526 on mailing card.

• The 1958-59 Filmstrip Catalog No. 8 is now available from Stanley Bowmar Co., Inc., 12 Cleveland St., Valhalla, N. Y. Included is information on projectors, screens, stands and storage cabinets, in addition to the more than 3500 titles in filmstrips grouped under subject headings.

For more details circle #527 on mailing card.

• Brochure #44T-300 illustrates a modern dishwashing system designed to serve institutions handling 200 to 400 persons per meal. Published by Fearless Dishwasher Co., Inc., 175 Colvin St., Rochester 2, N. Y., the brochure covers plumbing, operation, specifications and prices.

For more details circle #528 on mailing card.

• Bulletin 600-A1 on Herman Nelson Unit Ventilators contains detailed information on the "Draft/Stop" system, giving data on the component parts. The 28-page bulletin, released by American Air Filter Co., Inc., 215 Central Ave., Louisville 8, Ky., also carries diagrams, capacity tables, application drawings and suggested arrangements of models.

For more details circle #529 on mailing card.

• Portable Chalkboards and Bulletin Boards, and other products for visual demonstration and presentation, are the subject of a new 12-page catalog published by E. W. A. Rowles Co., 106 N. Hickory St., Arlington Heights, Ill. Full specifications, descriptive data and illustrations are included in the booklet.

For more details circle #530 on mailing card.

• Bavinco Arts and Crafts Furniture is illustrated and described in a 10-page catalog available from Bavinco Mfg. Corp., Buffalo 11, N. Y. Full specifications and line drawings of construction details of each item in the line are included.

For more details circle #531 on mailing card.

• Food Preparation and Serving Equipment manufactured by N. Wasserstrom & Sons, Inc., Columbus 15, Ohio, is described and illustrated in a 36-page catalog available from the company. In addition, specifications and line drawings of construction details and variations are included.

For more details circle #532 on mailing card.

(Continued on page 160)

• Ez-A-Way mechanical folding bleachers, chair stands, wall seats and "Gymaster;" All Steel portable and hydraulic, movable bleachers; Type "C" Standard and Deluxe Permanent Grandstands, and indoor sports backstops and electrically operated backstops are fully described in a new 12-page illustrated catalog on Berlin Bleachers issued by the Bleacher Division, Berlin Chapman Co., Berlin, Wis.

For more details circle #533 on mailing card.

• A series of color, sound filmstrips on various phases of floor care and the materials used are available from Multi-Clean Products, Inc., Ford Parkway, St. Paul 18, Minn., or from their local distributors.

For more details circle #534 on mailing card.

• Catalog No. 100-F issued by Lyon Metal Products, Inc., Aurora, Ill., covers the full line of Lyon Steel Equipment for schools, shops, offices and other institutions. It contains descriptive information and illustrations of all items in the line.

For more details circle #535 on mailing card.

• The varied uses of Alsynite translucent fiberglass panels in school construction are illustrated and described in the new 40-page Folder S-358 issued by Alsynite Co. of America, 4654 De Soto St., San Diego 9, Calif. How Alsynite installations can daylight schools to save costs; use of paneling in various sections of the school and for structural members, and qualities of Alsynite are some of the subjects covered.

For more details circle #536 on mailing card.

IN A FLASH Naden ELECTRIC SCOREBOARD

Here's the latest Naden football scoreboard, N-400-IV, with 24" Instant-Vue numerals, easily readable, day or night, from any seat in the stadium.

Write for Catalog No. 1N — Basketball; No. 2N—Football; No. 3N—Baseball. All Naden Football scoreboards are factory installed and fully guaranteed. Act now for installation this season.



NADEN AND SONS WEBSTER CITY, IOWA
NADEN INDUSTRIES WEBSTER CITY IOWA



The answer is
WELL-BUILT

W & B Williams & Brower, Inc.

- All lock joints
- Dovetail fittings
- Quality finishing



1400 Desk and Chair Unit available in various heights and top sizes from 18"x24" to 20"x26".

Desk tops available in wood or plastic

A complete line of classroom seating.



WILLIAMS & BROWER, INC.
SILER CITY, NORTH CAROLINA
30 YEARS OF DEPENDABLE SERVICE

TETRA PAK SCORES AGAIN

Large Number of North Carolina Schools Now Drink their Milk from New Container

Tetra Pak—America's newest container—is enjoying enthusiastic acceptance in schools within a 100 mile range of Wilmington, North Carolina, reports Sealtest Southern Dairies (Division of National Dairies).

The reason for this quick acceptance is simple: Tetra Pak offers advantages to children and school officials alike.

Children like Tetra Pak because of its unique shape. Also, the four-sided container doesn't tip over on trays. The notched corner makes it simple for even the youngest children to open.

Cafeteria managers like Tetra Pak because the 18-unit cases are easy to lift, easy to stack in refrigerators and serve as a handy dispenser when placed on the feeding line.

School officials like Tetra Pak because this modern container cuts cafeteria costs in both materials and labor.

Ask your local dairy about milk in Tetra Pak. If it is not available in your area, send us the name and address of your milk supplier. We will forward him full particulars. Write Department TK-8 at below address.



CROWN ZELLERBACH CORPORATION
343 SANSOME STREET, SAN FRANCISCO, CALIFORNIA



SELF SERVICE from cases which are placed on feeding line as handy dispensers.



LIGHT CASES are easily handled by women or student help.



CHILDREN PREFER THEIR MILK IN NEW EASY-TO-OPEN TETRA PAK CONTAINERS.

Folding Tables are NOT all alike!



No other tables have as many "Extra Features" as

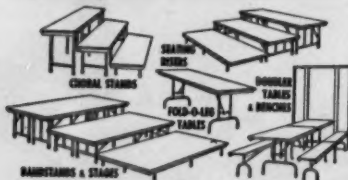
Mitchell
FOLD-O-LEG
tables

- ★ GREATER SEATING CAPACITY
- ★ MORE LEG COMFORT
- ★ UNEQUALED APPEARANCE, DURABILITY, STRENGTH
- ★ FINEST CONSTRUCTION, MATERIALS, FINISHES
- ★ BUILT FOR LONG SERVICE



TUBULAR STEEL FOLDING LEGS
SMOOTH, SANITARY TOPS
of Brown or New Light Finish
"Qualite" Masonite Presdwood,
Formica and Resilite in many
patterns and colors.

A COMPLETE LINE OF SPACE-
SAVING, PORTABLE, MULTIPLE-USE EQUIPMENT



Write for Descriptive Folders

MITCHELL MFG. CO.

2734 S. 34th St. • Milwaukee 46, Wis.

• The fascinating developments in Formica as a decorative mural material are discussed in a folder, "New Dimensions in Decorative Art," released by Formica Corporation, 4614 Spring Grove Ave., Cincinnati 32, Ohio. The results achieved with the three technics of original paintings, artlay and inlay are illustrated, and information is given on some of the beautiful decorative possibilities of this medium. A sound stripfilm prepared by the company tells the story and illustrates examples in full color of the applications of the new technics.

For more details circle #537 on mailing card.

• The Lupton curtain wall system, developed in cooperation with leading architects, is the subject of the 16-page Catalog SCW-580 issued by Michael Flynn Mfg. Co., 700 E. Godfrey St., Philadelphia 24, Pa. The catalog gives general and specific design data for the two main types of Lupton curtain walls which are designed specifically to form complete exterior walls for single or multi-story buildings of any type. Construction details with scale drawings of parts and typical elevations showing patterns are also included.

For more details circle #538 on mailing card.

• The new Type HP movable wall system developed by E. F. Hauserman Co., 7516 Grant Ave., Cleveland 5, Ohio, is the subject of a 12-page brochure recently released. Key features, complete architectural specifications and detailed sectional drawings of the wall system are presented in the fully-illustrated booklet.

For more details circle #539 on mailing card.

• "Modern School Building—A Study in True Values" is the title of a 24-page booklet issued by the Marble Institute of America, Inc., 32 S. Fifth Ave., Mount Vernon, N. Y. Starting with the premise that "the great need in school building today is true economy," the booklet discusses the double value given by marble which requires minimum maintenance, gives factual information on marble, suggests uses of marble in schools, and is profusely illustrated with school installations.

For more details circle #540 on mailing card.

• The complete line of Cole Office Equipment is presented in a newly revised 72-page catalog issued by Cole Steel Equipment Co., Inc., 145 Madison Ave., New York 17. Printed in black and white and color, the catalog carries descriptive details with illustrations on furniture, filing equipment, folding chairs, refinish enamel, cabinets, counters, lamps, lockers and other office equipment.

For more details circle #541 on mailing card.

• The benefits of automatic door operation are described in a folder on the ECA door operator developed by Electronics Corp. of America, One Memorial Drive, Cambridge 42, Mass. The effective mechanism contained in a single compact unit not much larger than a door check, and the simplicity of installation are some of the details discussed in the folder. The ECA door operators are supplied with either mat switches or photoelectric controls for immediate operation.

For more details circle #542 on mailing card.

• The Trane "Kinetic Barrier" Unit Ventilator school conditioner and all accessories are the subject of the new 56-page Catalog DS-340 released by The Trane Company, LaCrosse, Wis. Complete engineering information is given with description and illustrations of the many features and advantages of the equipment for the comfort and convenience of students and instructors. How the attractive unit offers complete and automatic heating combined with cooling from fresh outdoor ventilation air is one of the subjects covered in the new catalog.

For more details circle #543 on mailing card.

• "A Planned Approach to Textbook Maintenance . . . The Delkote Book Maintenance System," is the subject of a 4-page pamphlet recently reprinted by Delkote, Inc., P. O. Box 1335, Wilmington, Del., to help schools with this problem. Subjects covered include how the system works with new and old books, how to set up the system and the Delkote products available.

For more details circle #544 on mailing card.

• Many new items in the Bloomfield line are included in the new 1958 catalog recently released by Bloomfield Industries, Inc., 4546 W. 47th St., Chicago 32. Full catalog information is included on the new Marlex tote boxes and silverware bins, dish trucks and utility carts and other food-service products.

For more details circle #545 on mailing card.

• "Planning Your School Shop with Challenge Equipment" is the subject of a new 28-page booklet, Publication 609, available from The Challenge Machinery Co., Grand Haven, Mich. The booklet is designed to assist administrators and shop teachers in planning new graphic arts shop facilities or expanding present ones.

For more details circle #546 on mailing card.

Film Releases

Series of nine films, each 13 minutes, under title, "The World's A Stage," for classroom teaching, includes scenes from Shakespeare's "Anthony and Cleopatra," "Julius Caesar," "King Lear," "Macbeth," "Midsummer Night's Dream," "Othello" and "Winter's Tale." United World Films, Inc., Educational Dept., 1445 Park Ave., New York 29.

For more details circle #547 on mailing card.

Suppliers' News

Central Scientific Co., 1700 Irving Park Blvd., Chicago 13, manufacturer of laboratory equipment, announces a new sales distribution system. In future school science equipment made by this company will be marketed on a direct factory-to-user basis rather than through resale agencies. The new marketing policy will eliminate extra handling and give better and faster delivery.

Stacor Equipment Co., 285 Emmett St., Newark 5, N. J., manufacturer of Lifetime Quality drafting and school equipment, announces it has taken over the production and sale of Visionaire Library Furniture.

INDEX TO "WHAT'S NEW"

Pages 123-160

Key

- 464 Quadrangle Classroom Furniture
American Desk Mfg. Co.
- 465 D-5 Mobile Workbench
National Store Fixtures Co., Inc.
- 486 Type 86 Exit Device
Vonnegut Hardware Co.
- 487 Poly-Kote Floor Finish
Hillyard Chemical Co.
- 488 Improved Safe-Wel
Fred Medart Products Inc.
- 489 Stacking Chairs
The Peabody Seating Co., Inc.
- 470 Lathe Filler Block
Rockwell Mfg. Co.
- 471 Package Refrigeration Unit
The Halsey W. Taylor Co.
- 472 Cardinal China
Syracuse China Corp.
- 473 #107 Table Model Lab-Volt
Buck Engineering Co., Inc.
- 474 Glide Concentrated Cleaner
East Coast Soap Corp.
- 475 Supramic School Coach
Wayne Works Inc.
- 476 Model 584 Electric Hand Sander
Porter-Cable Machine Co.
- 477 Aluminum Plate Covers
Wear-Ever Aluminum, Inc.
- 478 Machine Construction Kit
FAC Division
- 479 Model 65
The Kent Co., Inc.
- 480 Model 88 E-Con-O-Vac
General Floorcraft Inc.
- 481 Touch Football Belt
W. J. Voit Rubber Corp.
- 482 Model 5 Powermaster
Orr & Sombower Inc.
- 483 School Master Filmstrip Projectors
Graflex Inc.
- 484 Jet-Dri Enamel
Consolidated Chemical & Paint Mfg.
Co., Inc.
- 485 Morton Midgels
Morton Salt Co.
- 486 Educator Dry Mounting Press
Seal Inc.
- 487 Hewmatic "T"
Howe Folding Furniture, Inc.
- 488 Argus Luminaires
Lighting Dynamics
- 489 Spungold Tactolite
General Electric Co.
- 490 10" Precision Lathes
South Bend Lathe
- 491 Richmond Fixtures
The Miller Co.

Key

- 492 "Step-Ahead" Floor Finish
S. C. Johnson & Son, Inc.
- 493 Audio Instructor, Model PR-10
Stromberg-Carlson
- 494 Graduated Glass Cylinder
Corning Glass Works
- 495 Pocket Audiometer
Maico Electronics Inc.
- 496 Busch Super Cine-educator
Busch Film & Equipment Co.
- 497 Mura-Tack Boards
Mural Arts
- 498 Prestape Movie Splicer
Eastman Kodak Co.
- 499 Oval-Shaped Trampoline Tubing
Nissen Trampoline Co.
- 500 Style-Line Desks
The Benton Mfg. Co.
- 501 Model PRO-13 Floor Machine
Hild Floor Machine Co., Inc.
- 502 New York School Vision Tester
Bausch & Lomb Optical Co.
- 503 Liquid Hot Chocolate Mix
Continental Coffee Co.
- 504 Ekotape 310
Webster Electric Co.
- 505 Model 82 Round Drum Top
Bennett Mfg. Co., Inc.
- 506 Structo Schools
Structo Schools Corp.
- 507 Sportsmaster Scoreboard
M. D. Brown Co.
- 508 Arielite Blacklitter
Arieli Davis Mfg. Co.
- 509 No. 15 Floor Seal
G. H. Tennant Co.
- 510 Multiple Unit Drawing Table
Broddhead-Garrett Co.
- 511 Valco-Dek Roofing System
The Monroe Co., Inc.
- 512 Chair Cart with Roll-Guide
Roll-Away Truck Mfg. Co., Inc.
- 513 Packet Brand Lemonwedges
Unit-Packet Corp.
- 514 Basketball Backstops
Wayne Iron Works
- 515 Imperial Series in Excelon Tile
Armstrong Cork Co.
- 516 Recess Track
Vallen, Inc.
- 517 Mulch-Vac Sweeper
Good Roads Machinery Corp.
- 518 Ideal Serv-Mobile
The Swartzbaugh Mfg. Co.
- 519 1958-59 Sports Calendar
Master Lock Co.
- 520 Strong Spotlights Brochure
The Strong Electric Corp.

Key

- 521 Mathematics Instru-
W. M. Welch S.
- 522 "Bookkeeping Mach-
ual"
Underwood Co.
- 523 "Give Your School
Airkem Inc.
- 524 Wood Laboratory E-
Metalab-Labcor
- 525 Stockpile of Teaching
Victor Animato
- 526 "Allegheny Stainless
and Serving"
Allegheny Ludl
- 527 Filmstrip Catalog N
Stanley Bowma
- 528 Brochure #447-300
Fearless Dishw
- 529 600-A1
American Air F
- 530 1958-59 Catalog of
tin Boards
E. W. A. Rowle
- 531 Arts & Crafts Furni-
Bavinto Mfg. C
- 532 Food Preparation &
Catalog
N. Wassarstrom
- 533 Bleachers Catalog
Berlin Chapmas
- 534 Floor Care Filmstrips
Multi-Clean Pro
- 535 Catalog No. 100-F
Lyon Metal Pro
- 536 Brochure S-358
Alysnite Co. of
- 537 "New Dimensions in
Formica Corp.
- 538 Catalog SCW-580
Michael Flynn M
- 539 Type HP Movable V
E. F. Hauserman
- 540 "Modern School Build-
Marble Institute
- 541 1958 Catalog "B"
Cole Steel Equi
- 542 ECA Door Operators
Electronics Corp
- 543 Catalog DS-340
The Trane Co.
- 544 Textbook Maintenance
Deltote Inc.
- 545 1958 Catalog
Bloomfield Indus
- 546 Publication 608
The Challenge
- 547 "The World's A Step
United World F

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WHAT'S NEW												ADVERTISEMENTS											
464	465	466	467	468	469	470	471	472	473	474	475	548	549	550	551	552	553	554	555	556	557	558	
476	477	478	479	480	481	482	483	484	485	486	487	584	585	586	587	588	589	590	591	592	593	594	
488	489	490	491	492	493	494	495	496	497	498	499	596	597	598	599	600	601	602	603	604	605	606	
500	501	502	503	504	505	506	507	508	509	510	511	608	609	610	611	612	613	614	615	616	617	618	
512	513	514	515	516	517	518	519	520	521	522	523	620	621	622	623	624	625	626	627	628	629	630	
524	525	526	527	528	529	530	531	532	533	534	535	632	633	634	635	636	637	638	639	640	641	642	
536	537	538	539	540	541	542	543	544	545	546	547	644	645	646	647	648	649	650	651	652	653	654	
												656	657	658	659	660	661	662	663	664	665	666	
												668	669	670	671	672	673	674	675	676	677	678	
												680	681	682	683	684	685	686	687	688	689	690	
												692	693										

NAME

INSTITUTION

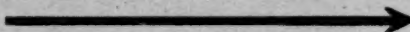
ADDRESS

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INDEX TO ADVERTISEMENTS ON FOLLOWING PAGE



Instruments Catalog
 Welch Scientific Co.
 Machine Instruction Man-
 ed Corp.
 School a New 'A' ''
 nc.
 tory Equipment Catalog
 Labcraft
 earching Films Pamphlet
 imatograph Corp.
 ainless in Food Preparation
 y Ludlum Steel Corp.
 log No. 8
 owmar Co., Inc.
 -300
 Dishwasher Co., Inc.
 Air Filter Co., Inc.
 g of Chalkboards & Bulle-
 Howles Co.
 Furniture Catalog
 Mfg. Corp.
 ion & Serving Equipment
 rstrom & Sons, Inc.
 olog
 pman Co.
 nstrips
 an Products, Inc.
 30-F
 al Products Inc.
 Co. of America
 ans in Decorative Art''
 Corp.
 580
 ryan Mfg. Co.
 ble Wall System Brochure
 userman Co.
 el Building''
 nstitute of America Inc.
 "B"
 l Equipment Co., Inc.
 rators Folder
 a Corp. of America
 0
 Co.
 tenance Pamphlet
 nc.
 Industries, Inc.
 eage Machinery Co.
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MENTS

4 355 356 357 358 359
 6 367 368 369 370 371
 8 379 380 381 382 383
 0 391 392 393 394 395
 2 603 604 605 606 607
 4 615 616 617 618 619
 6 627 628 629 630 631
 8 639 640 641 642 643
 0 651 652 653 654 655
 2 663 664 665 666 667
 4 675 676 677 678 679
 6 687 688 689 690 691

WHAT'S NEW

464 465 466 467 468 469
 470 471 472 473 474 475
 476 477 478 479 480 481
 482 483 484 485 486 487
 488 489 490 491 492 493
 494 495 496 497 498 499
 500 501 502 503 504 505
 506 507 508 509 510 511
 512 513 514 515 516 517
 518 519 520 521 522 523
 524 525 526 527 528 529
 530 531 532 533 534 535
 536 537 538 539 540 541
 542 543 544 545 546 547

ADVERTISEMENTS

348 349 350 351 352 353 354 355 356 357 358 359
 360 361 362 363 364 365 366 367 368 369 370 371
 372 373 374 375 376 377 378 379 380 381 382 383
 384 385 386 387 388 389 390 391 392 393 394 395
 396 397 398 399 400 401 402 403 404 405 406 407
 408 409 410 411 412 413 414 415 416 417 418 419
 420 421 422 423 424 425 426 427 428 429 430 431
 432 433 434 435 436 437 438 439 440 441 442 443
 444 445 446 447 448 449 450 451 452 453 454 455
 456 457 458 459 460 461 462 463 464 465 466 467
 468 469 470 471 472 473 474 475 476 477 478 479
 480 481 482 483 484 485 486 487 488 489 490 491
 492 493

TITLE

NAME

TITLE

INSTITUTION

ADDRESS

CITY

ZONE

STATE

STATE

+++ INDEX TO A

Key	
609	Heinz Comp Institu
609	Heinz Comp Institu
610	Harris Ref Refrige
611	Heywood H School
612	Hillyard Ch Floor I
613	Hobart Mig Dishw
614	Holcomb M Floor C
615	Hunt Pen Pencil
616	Huntington Floor I
617	Hussey Mar Gym S
618	Insulrock C Buildin
619	Internation operation Electric
620	Johns-Manv Buildin
621	Johns-Manv Acoust
622	Johnson Ser Tempo
623	Junkunc Br Locks
624	Kawanee In Dishw
625	Keystone Vi Visual
626	Kimberly-Cl Cellulose Sanitari
627	Klemade Pr Sanitari
628	Krueger Mel School
629	Laboratory Labora
630	Lennex Ind Tempo
631	McArthur & Gym T
632	McCray Ref Refrige
633	McQuay, In Air Con
634	Medart Prod Gymnasu
635	Meier-Johan Lightin
636	Mellish Pro Step Tr

CHICAGO 11, ILLINOIS

ADVERTISEMENT

Page	Key	Page	Key	Page
Company, H. J.	637 Metalab Equipment Company	86	666 S & S Products Inc.	35
Institutional Food	Laboratory Equipment		Beverage Coolers	
Company, H. J.	638 Midwest Folding Products Sales Corp.	118	667 St. Charles Mfg. Company	
Institutional Food	Folding Tables		Homemaking Classroom	107
Refrigerator Company	639 Minneapolis-Honeywell Regulator Co.	10, 11	Equipment	
Refrigerators	Clock & Program System		668 Safway Steel Products, Inc.	28
Food-Wakefield Company	640 Mississippi Glass Company	131	Gym Seats	
School Furniture	Diffusing Glass		669 School Equipment Manufacturing	
ard Chemical Company	641 Mitchell Mfg. Company	160	Corporation	
Floor Maintenance	Folding Tables		Classroom Sink Unit	113
rt Mfg. Company	642 Monroe Company	120	670 Science Kit Lab. Corp.	
Dishwashing Equipment	Folding Tables		Laboratory Equipment	152
mb Manufacturing Company J. I.	643 Naden Industries	114, 158	671 Shwayder Brothers, Inc.	32a
Floor Maintenance	Scoreboards		School Furniture	
Pen Company, C. Howard	644 Natick Corporation	147	672 Simons Company	121
Pencil Sharpener	Ceramic Tile		Maintenance Products	
ington Laboratories, Inc.	645 National Cornice Works	128	673 Singer Sewing Machine Company	30
Floor Maintenance	Electric Food Carts		Sewing Machine	
ny Manufacturing Company, Inc.	646 National Gypsum Company	119	674 Sloan Valve Company	1
Gym Seating	Acoustical Material		Flush Valves	
ock Company	647 National School Furniture Company	146	675 Snyder Tank Corporation	139
Building Slabs	School Furniture		Bleachers	
ational Business Machines Cor-	648 National Time & Signal Corp.	130	676 South Bend Lathes Works	90
poration	Clock & Program System		Machine Shop Teaching Aids	
Electric Typewriters	649 Norris Dispensers, Inc.	154	677 Sperry-Faraday, Inc.	26
Manville	Milk Vender		Communication Systems	
Building Panels	650 Norton Door Closer Company	157	678 Standard Electric Time Company	153
Manville	Door Closers		Clock & Program System	
Acoustical Material	651 Nystrom & Company, A. J.	35	679 Steccane Products Corporation	129
on Service Company	Science Charts		Floor Maintenance	
Temperature Control	652 Owens Illinois: Kimble Glass	36, 37	680 Stromburg Time Corporation	106
ac Brothers	Company Subsidiary		Clock & Program System	
ocks	Glass Block & Toplite Panels		681 Theat Industries, Inc.	128
ase Industrial Washer Corp.	653 Owens Illinois: Libbey Glass	137	School Furniture	
Dishwasher	Glassware		682 Tolerton Company	156
one View Company	654 Peterson & Company, Leonard	144	Laboratory Equipment	
Visual-Survey Test	Laboratory Furniture		683 United States Ceramic Tile Company	Cover 4
arly-Clark Corporation	655 Pittsburgh Corning Corporation	115	Ceramic Tile	
ucotton Division	Glass Block		684 Universal Bleacher Company	5
Sanitary Napkins	656 Pittsburgh Plate Glass Company	90, 91	Bleachers	
ade Products, Inc.	Window Glass		685 Varley & Sons, Inc., James	97
Sanitation Program	657 Potter Fire Escape Company	124	Maintenance Products	
er Metal Products Company	Fire Escape		686 Viewlex, Inc.	34
Wheel Seating	658 Radio Corporation of America	40	Projectors	
atory Furniture Company, Inc.	School Sound System		687 Virco Manufacturing Company	29
Laboratory Furniture	659 Rauland-Borg Corporation	97	School Furniture	
k Industries Inc.	School Sound System		688 Vogel-Peterson Company	114
Temperature Control	660 Republic Steel Corporation	108, 109	Wardrobe Systems	
har & Sons, Inc., George	Steel Products		689 Vonnegut Hardware Co., Van Duprin	141
Gym Towels	661 Rex-Rotary Distributing Corporation	110	Division	
Refrigerator Co., Inc.	Duplicating Equipment		Fire & Panic Exit Devices	
Refrigerators	662 Rilco Laminated Products, Inc.	112	690 Waco Mfg. Company	116
ry, Inc.	Laminated Beams		Bleachers	
ir Conditioning	663 Rixson Company, Oscar C.	14	691 Washington Steel Corporation	33
Products, Inc., Fred	Door Closers		Stainless Steel	
Gymnasium Equipment	664 Robbins Flooring Company	101	692 Westinghouse Electric Corporation	25
ohan-Wengler	Wood Flooring		Water Coolers	
ighting Fixtures & Tablets	665 Royal Typewriter Co., Division of	125	693 Williams & Brower, Inc.	158
Products Company, Inc.	Royal McBee Corp.		School Furniture	
Shop Treads	Electric Typewriters			

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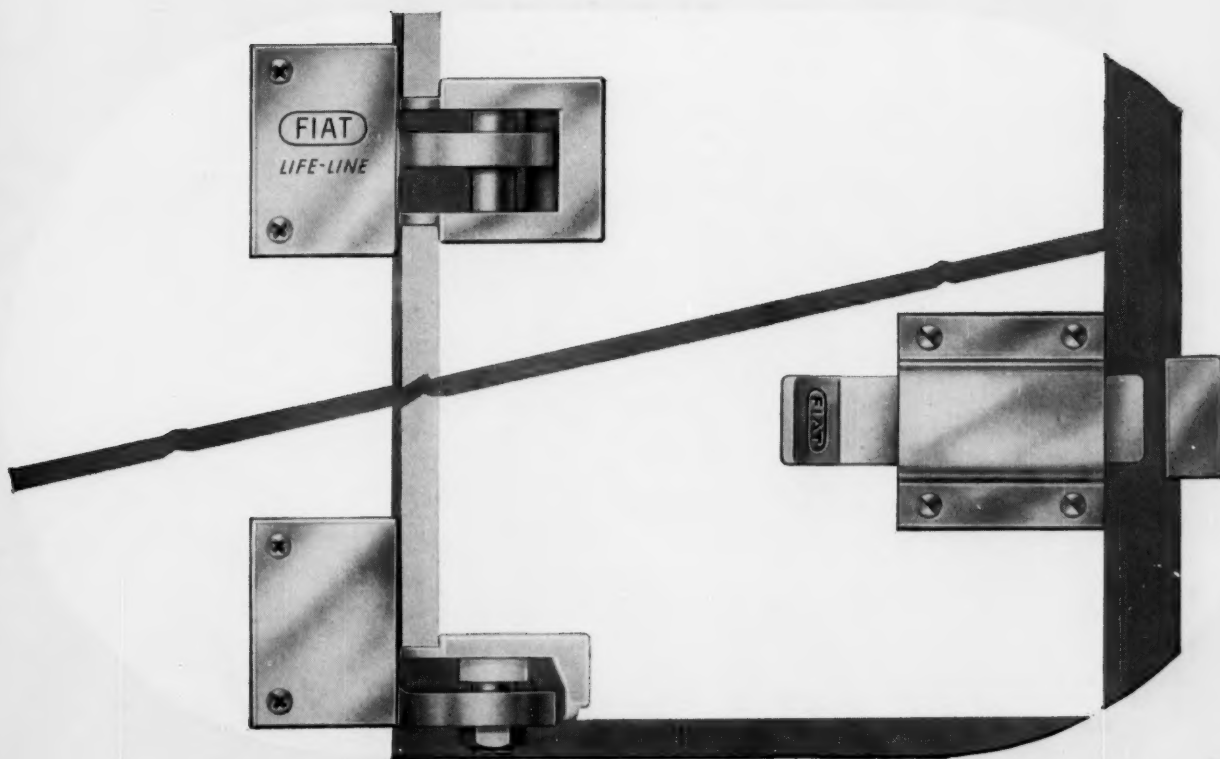
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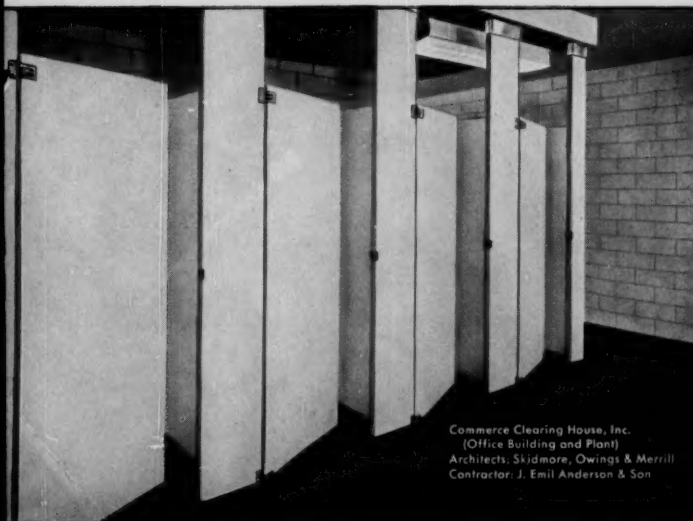
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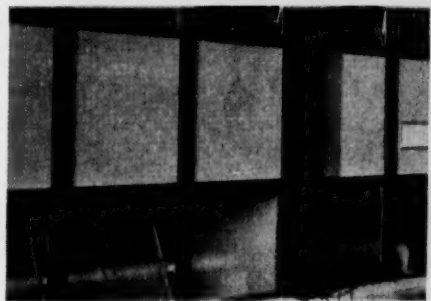
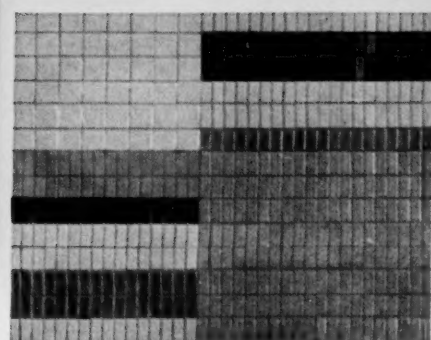


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**Exterior panels of
Romany•Spartan ceramic tile
bring new low cost beauty
to Wisconsin school**



Above: Close up of inner court wall panel
Below: Outer court panels of unglazed tile

Milwaukee Country Day School, Milwaukee, Wis.
Architects: Scott, Kloppenburg & Scott, Milwaukee
Tile Contractor: Durner Company, Milwaukee

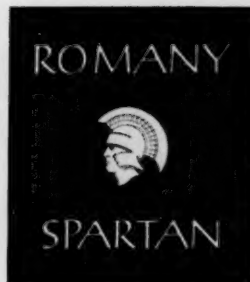
Here's an outstanding exterior application of ceramic tile. In the recently completed addition to Milwaukee's Country Day High School, the architects achieved this eye-catching design on inner court walls through the skillful use of Romany•Spartan buff body glazed tile in two sizes; seven colors. No less attractive, but entirely different, are the outer court walls, made of unglazed 2" x 2" Romany•Spartan Orsans.

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Select from Romany•Spartan's complete range of colors, sizes, finishes and textures. If you'd like help in working out your design problems, get in touch with your nearby Romany•Spartan representative or write: United States Ceramic Tile Company, Dept. S-22, Canton 2, Ohio.



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